# State of Alaska FY2008 Governor's Operating Budget

Department of Environmental Conservation Performance Measures

# **Contents**

| Department of Environmental Conservation                 | 4   |
|--|-----|
| Mission  | 4   |
| Core Services  |     |
| End Results  |     |
| Strategies to Achieve Results                            |     |
| Major Activities to Advance Strategies                   |     |
| Prioritization of Agency Programs                        |     |
| Administration Results Delivery Unit                     |     |
| End Results  |     |
| Strategies to Achieve Results                            |     |
| Component: Office of the Commissioner                    |     |
| End Results  |     |
| Strategies to Achieve Results                            |     |
| Component: Information and Administrative Services       |     |
| End Results  |     |
| Strategies to Achieve Results                            |     |
| Environmental Health Results Delivery Unit               | 35  |
| End Results  |     |
| Strategies to Achieve Results                            |     |
| Component: Food Safety & Sanitation                      |     |
| End Results  |     |
| Strategies to Achieve Results                            | 44  |
| Component: Laboratory Services                           |     |
| End Results  |     |
| Strategies to Achieve Results                            |     |
| Component: Drinking Water                                |     |
| End Results  |     |
| Strategies to Achieve Results                            | 55  |
| Component: Solid Waste Management                        | 61  |
| End Results  | 61  |
| Strategies to Achieve Results                            | 61  |
| Air Quality Results Delivery Unit                        | 67  |
| End Results  | 67  |
| Strategies to Achieve Results                            | 67  |
| Component: Air Quality                                   |     |
| End Results  | 76  |
| Strategies to Achieve Results                            | 76  |
| Spill Prevention and Response Results Delivery Unit      | 85  |
| End Results  |     |
| Strategies to Achieve Results                            |     |
| Component: Contaminated Sites Program                    |     |
| End Results  |     |
| Strategies to Achieve Results                            | 91  |
| Component: Industry Preparedness and Pipeline Operations |     |
| End Results  |     |
| Strategies to Achieve Results                            |     |
| Component: Prevention and Emergency Response             |     |
| End Results  |     |
| Strategies to Achieve Results                            |     |
| Component: Response Fund Administration                  | 102 |

|                                  | Department of Environmental Conservation |
|----------------------------------|--|
| End Results                      | 102                                      |
| Strategies to Achieve Results    |  |
| Water Results Delivery Unit      | 105                                      |
| End Results                      | 105                                      |
| Strategies to Achieve Results    | 105                                      |
| Component: Water Quality         | 119                                      |
| End Results                      | 119                                      |
| Strategies to Achieve Results    | 119                                      |
| Component: Facility Construction | 130                                      |
| End Results                      |  |
| Strategies to Achieve Results    | 130                                      |

# **Department of Environmental Conservation**

#### **Mission**

Protect human health and the environment.

# **Core Services**

- Develop and enforce standards for protection of the environment that allow for sustainable economic growth.
- Provide controls and enforcement for the prevention and abatement of pollution to the environment.
- Provide controls and enforcement to protect citizens from unsafe sanitary practices.

| End Results  | Strategies to Achieve Results  |
|--|--|
| A: The Environment is Protected.   | A1: Establish Protective Standards   |
| Target #1: Impacts of new and historical pollution to land and water are reduced.  Measure #1: % increase from the prior year of polluted environments remediated or restored for use. | Target #1: Priority programs for environmental protection are up to date by 2008.  Measure #1: Revisions to priority programs for environmental protection are % complete (4 yr Strategic Plan).   |
| Target #2: Clean Air  Measure #2: % of population living in areas in compliance with health based Air Quality Standards (natural events excluded).                                     | A2: Contain and Cleanup Pollution in the<br>Environment  |
| excluded).   | Target #1: 98% of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.  Measure #1: % of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.                            |
|  | A3: Control Pollution to the Environment   |
|  | Target #1: Pollution control inspection and certification programs are implemented by FY2007.  Measure #1: % of inspection and certification programs implemented by FY2007.   |
|  | Target #2: Known regulated industry and community facilities operate with authorizations/permits or certifications.  Measure #2: % of known regulated industry or community facilities operating with appropriate authorizations/permits or certifications.        |
|  | A4: Enforce Pollution Controls   |
|  | Target #1: The percent of total enforcement actions that require civil or criminal enforcement to return the regulated community to compliance is reduced.  Measure #1: Change in percent of total enforcement actions that require civil or criminal enforcement. |

| End Results   | Strategies to Achieve Results  |
|---|--|
| B: Citizens are Protected from Unsafe Sanitary Practices  | B1: Establish Protective Standards   |
| Target #1: No public illness outbreaks in regulated facilities.  Measure #1: Number of regulated facilities with reported public illness outbreaks. | Target #1: Priority programs for safe sanitary practices are up to date by 2008.  Measure #1: Revisions to priority programs for safe sanitary practices are % complete (4 yr Strategic Plan).  B2: Control Sanitary Practices                                     |
|   | Target #1: Safe sanitary practice inspection and certification programs are implemented by FY2007.  Measure #1: % of programs for inspection and certification for safe sanitary practices implemented by FY2007.  |
|   | B3: Enforce Controls for Safe Sanitary Practices   |
|   | Target #1: The percent of total enforcement actions that require civil or criminal enforcement to return the regulated community to compliance is reduced.  Measure #1: Change in percent of total enforcement actions that require civil or criminal enforcement. |

# **Major Activities to Advance Strategies**

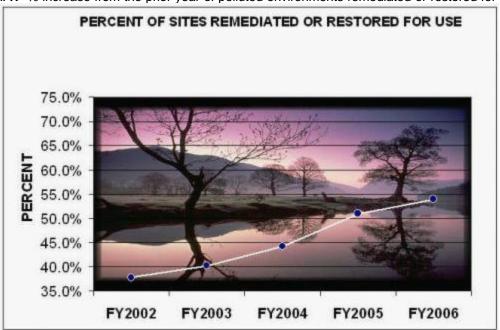
- Develop and implement protective standards.
- Provide statewide support systems and information management.
- Provide assurances of safe sanitary conditions.
- Respond to, contain, and cleanup incidents of pollution to the environment.
- Provide effective and efficient permit and inspection programs.
- Enforcement compliance fairly and consistently statewide.

| FY2008 Resources Allocated to Achieve Results |                      |          |
|---|----------------------|----------|
| EV2009 Department Budget: \$76 724 400        | Personnel: Full time | F97      |
| FY2008 Department Budget: \$76,721,400        | Part time            | 537<br>1 |
|   | Total                | 538      |

#### Performance Measure Detail

# A: Result - The Environment is Protected.

Target #1:Impacts of new and historical pollution to land and water are reduced. Measure #1: % increase from the prior year of polluted environments remediated or restored for use.



**Analysis of results and challenges:** This measure combines Spill Prevention and Response data for recovery of sites contaminated with oil or hazardous substances with that of the Water Division on recovered waterbodies.

Spill Prevention and Response - Contaminated Sites Program

Alaska has many sites that have been contaminated with oil or hazardous substances. Additional sites are discovered almost daily. Most of the contamination is historic, much of it occurring before the risks to the environment and human health were known. Severely contaminated sites may also have adverse economic and social impacts in terms of cleanup costs, or limitations on land use or land sales or transfers.

It is important that historic contaminated sites are found and reported, so that appropriate steps can be taken to protect the public. However, as the data shows, for every site that is cleaned or cleaned to a point that no further action is required, nearly as many contaminated sites are discovered each year, making it a challenge to show progress toward reducing the number of contaminated sites in the state.

The program's goal is to be able to continue remediating sites at a rate that maintains the relative percentage of total sites remediated the previous year. Data shows that in FY2006 there was a 3% increase over the prior year.

#### Division of Water

Polluted, or "impaired" waterbodies are identified in the biennial "Integrated Report" submitted by the Department to the Environmental Protection Agency. Data for this measure is available every two years when the report is prepared. The Division of Water establishes a target of at least 10 active restoration projects per year. Restoration projects may be conducted by grantees who have received funds through the Alaska's Clean Water Actions (ACWA) grant program, by contractors, by other State agencies with funds received from ADEC through Reimbursable Services Agreements, or by Department personnel. During FY2005, 18 restoration projects were ongoing on impaired waters. During FY2006, 22 restoration projects were ongoing on impaired waters.

Target #2:Clean Air

**Measure #2:** % of population living in areas in compliance with health based Air Quality Standards (natural events excluded).



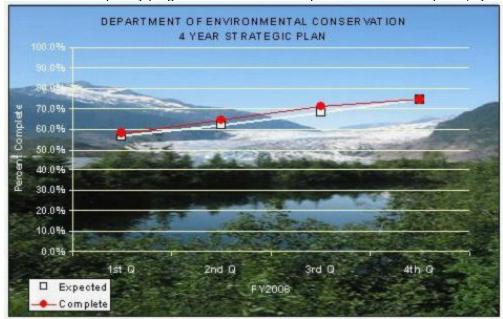
**Analysis of results and challenges:** Air monitoring is performed to ensure compliance with the National Ambient Air Quality Standards (NAAQS) for the protection of public health. Traditionally monitoring takes place in larger communities or where complaints have been received. Air Quality for the rest of the state is assumed to be good.

The graph listed above demonstrates that there were no violations of the fine particulate standard (PM 2.5) during the first three quarters of FY06 or carbon monoxide (CO) standard during the winter 2005-2006 from human caused activity within the State's customary monitoring network. The 4th quarter data for FY06 will be available December 2006.

In addition to the State monitoring network, the Air Quality division is engaged in an air monitoring project to measure airborne levels of dust (PM 10) pollution as part of a Department of Transportation (DOT) research project evaluating the effectiveness of paving roads in Kotzebue. High airborne dust levels from vehicle traffic on unpaved roads violate the health based standard in Kotzebue and other rural communities. The Department will be working with the affected communities and DOT to develop an effective control strategy for dust in the Region.

# A1: Strategy - Establish Protective Standards

**Target #1:** Priority programs for environmental protection are up to date by 2008. **Measure #1:** Revisions to priority programs for environmental protection are % complete (4 yr Strategic Plan).



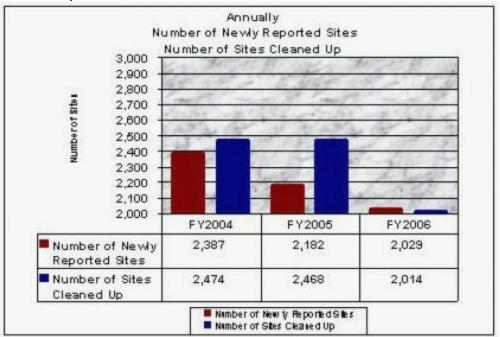
**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent, abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action and establish standards by which to measure success.

This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects, and averaged over the department. Overall, at 74.5% completion, performance is on track.

# A2: Strategy - Contain and Cleanup Pollution in the Environment

**Target #1:**98% of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.

**Measure #1:** % of newly reported spills of oil and hazardous substances and contaminated sites cleaned up annually.



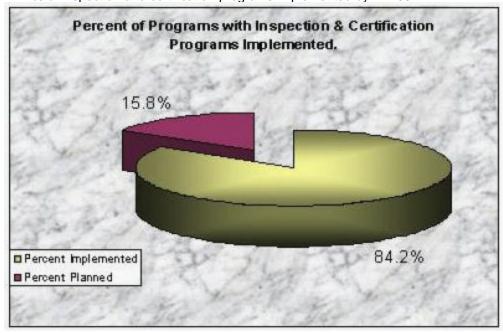
**Analysis of results and challenges:** There are two types of contaminated sites reported to divisions within the Department of Environmental Conservation each year; new spills of oil and hazardous substances and discovery of sites with historical (old) contamination.

As sites are reported they are either cleaned and closed through the initial response phase or are referred to the Contaminated Sites program for long-term remediation. Historically, more sites are reported each year than can be cleaned up, creating a steady increase in the number of sites. Depending on the number of sites reported in a year, the type or extent of contamination and the stage of completion at the end of a reporting period, the annual percent of sites cleaned up will fluctuate and, as happened in FY2004 and FY2005, can go above 100%.

The program's goal is to annually clean a number of sites that is at least 98% of the number of newly reported sites each year. In FY2006, 99.5% of newly reported sites were cleaned.

# A3: Strategy - Control Pollution to the Environment

**Target #1:** Pollution control inspection and certification programs are implemented by FY2007. **Measure #1:** % of inspection and certification programs implemented by FY2007.

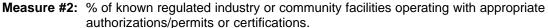


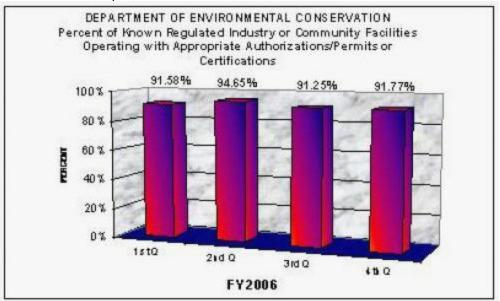
**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action.

In order to be sure that protective standards are met and pollution controls followed, inspection and certification programs are established to document compliance.

The measure summarizes department progress against a plan for implementing new inspection and certification programs.

**Target #2:**Known regulated industry and community facilities operate with authorizations/permits or certifications.





**Analysis of results and challenges:** In order to ensure protective standards are met and pollution controls followed, DEC authorizes or certifies the operation of industry or community facilities. Please also note Strategy #A3-1.

#### Division of Air Quality

Our goal is for 100% of regulated sources to operate under the appropriate permit or approval.

DEC controls air pollution to the environment through the following permits: pre-approved limits, owner requested limits, permits by rule, general permits, source-specific permits. State law allows an applicant to operate a source under an operating permit application shield until the Department issues an operating permit. Major source permits are required for air pollution sources covered under Title I and Title V of the federal Clean Air Act. Similar to many other states, Alaska's permit program also requires issuance of minor source permits for sources having the potential to cause unhealthy air quality conditions.

The Department's Air Permits Program is mature with respect to meeting all federal requirements. Although the Department has not kept records on this specific goal before FY 2004, close to 100% of all regulated air permit sources operate under an air permit or application shield. The Air Permits program completed a major reform effort in 2005 to attain a predictable, reliable and rational permitting goal. The reforms were implemented and began to show results in FY2006.

The program continues to achieve its goals through FY2006. As more five-year air permits expire, the Program will continue to renew general operating permits and source-specific permits. For air permits, we anticipate little change in the current success rate.

October 1, 2004 was the effective date for regulations establishing the program's minor source permit program and reforming the existing major source permit program. These regulations changed stationary source categories that require an air permit and changed the types of permits the program issues. The program expects minimal challenges to achieve its stated goals under the new program with resources currently allocated.

#### Division of Spill Prevention and Response

Regulated facilities and vessel operators including: oil exploration and oil production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms and tankers, non-crude oil tank vessels and barges, and non-

tank vessels are required to have approved oil spill contingency plans and certificates of financial responsibility in place before they are allowed to operate in Alaska. Contingency plans outline the various steps and procedures that would be followed to allow quick and effective cleanup in the event of an unanticipated oil spill. Certificates of financial responsibility ensure that the party responsible for a spill will be able to pay for cleanup costs, including reimbursement for any State funds spent as a result of the spill. These facilities and vessel operators cannot legally operate without approved contingency plans and certificates of financial responsibility in place, and compliance is maintained at 100%.

Underground petroleum storage tanks are also regulated. These are primarily gas stations, RV parks and other facilities that maintain underground petroleum storage. Federal law requires these facilities to be inspected and tagged every three years or they are unable to accept deliveries. The data for this measure will fluctuate as new underground petroleum storage tanks are opened and existing tanks are closed.

#### Division of Environmental Health

Municipal landfills that receive over five tons of waste per day (Class I and Class II Landfills) require an authorization from DEC. All facilities required to have permits either have them or are in the process of applying or renewing them.

In the current permitting system, small communities producing less than 5 tons of municipal solid waste per day are required to have a Class III permit. Only 25% of the Class III communities have permitted landfills. The department is changing the structure of the solid waste program to improve the number of authorized Class III landfills.

Location specific data is being developed for the Class III landfills that will allow a community to evaluate if they qualify for the prior authorization landfill permit program. A risk calculator, linked to landfill design criteria and operational parameters that are specific to landfill location, will be used to make the evaluation and qualify for prior authorization of the landfill.

#### Division of Water

The Wastewater Discharge Permit program issues three kinds of wastewater discharge approvals:

- 1) State individual permits and authorizations under 18 AAC 72
- 2) State permits and plan approvals of on-site disposal (septic systems) under 18 AAC 72
- 3) Certification that EPA-issued NPDES permits meet state water quality standards under 18 AAC 70.

State-issued permits and especially authorizations under state general permits, can meet the 100% measure more easily than certification of NPDES permits. This are quick turnaround, predictable discharges and do not require advanced analysis of the impacts. NPDES permits are for large volume, more complex discharges and state certification can be slowed during permit negotiations and responding to comments received by the public on draft permits.

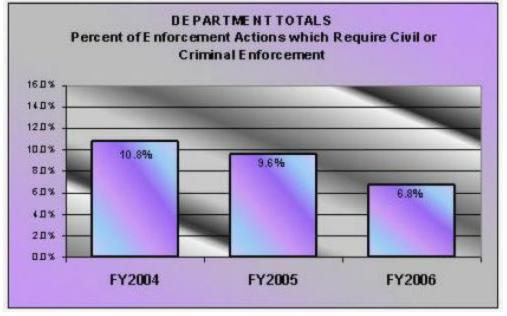
As part of NPDES primacy assumption, some state permits may need to be converted to NPDES permits. DEC and EPA plans to share permit duties as capacity building for primacy. With the transition, the program does not expect to meet its goal of 100% in this fiscal year.

A major tool for tracking and keeping permits current is the new permit database developed in anticipation of NPDES primacy. Achieving the 100% target will be improved with automatic notification of renewals built into the system.

# A4: Strategy - Enforce Pollution Controls

**Target #1:**The percent of total enforcement actions that require civil or criminal enforcement to return the regulated community to compliance is reduced.





**Analysis of results and challenges:** The Alaska Department of Environmental Conservation has primary responsibility for the enforcement of laws governing the protection of water, land and air quality. Normally these laws are enforced by the regulatory staff through administrative or civil remedies.

Protecting the environment requires that we establish protective standards and enforce those standards. The effectiveness of our enforcement programs can be measured by looking at voluntary compliance of the regulated community – compliance before legal action becomes necessary.

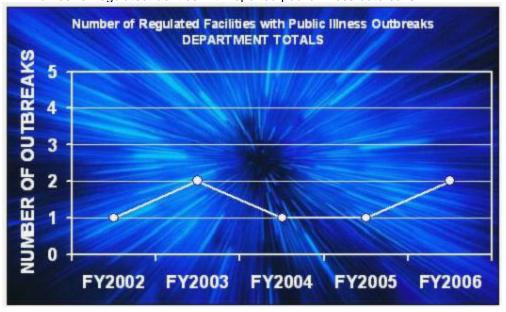
However, when polluting or environmentally harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered. In addition to threatening the quality of Alaska's environment, nearly all environmental crimes involve a risk to public health, now or in the future. Environmental crimes include: the illegal discharge of pollutants into Alaska's water sources; the improper disposal of solid or hazardous waste; and the illegal discharge of pollutants into the atmosphere.

In most instances DEC programs warn and always investigate violators prior to taking legal action. These actions are tracked in the environmental crimes database.

(For further information on administrative penalties or to view the FY2005 enforcement report – visit http://www.state.ak.us/dec/das/info\_services/pdfs/enfreport.pdf)

# **B: Result - Citizens are Protected from Unsafe Sanitary Practices**

**Target #1:**No public illness outbreaks in regulated facilities. **Measure #1:** Number of regulated facilities with reported public illness outbreaks.



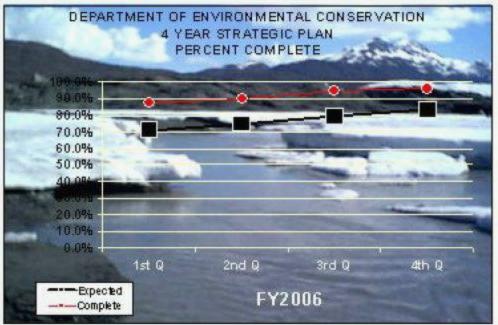
Analysis of results and challenges: The Epidemiology section of Health and Social Services (HSS) conducts investigations of outbreaks of human illness and death and, with the help of DEC investigators, determines the source of the outbreak. On a routine basis, Environmental Health Officers investigate cases of suspected food borne illness in coordination with the Department of Health and Social Services. Investigation requires Food Safety staff to take food case histories and conduct risk focused inspections of regulated food establishments to determine if food preparation, handling, source, or employee health may be the causative or contributing factors for the illness. The measure does not include illness determined through investigation to be a result of norovirus infections associated with food and sanitation practices, or food borne illness which results from consumer mishandling of retail food.

Data displayed here reflects the number of food facilities and drinking water systems, regulated by DEC, that were determined to be the source of an outbreak during the reporting period.

While we can track those outbreaks reported to HSS, many incidents of illness related to food or drinking water may never actually get reported. In milder cases, symptoms may be mistaken for ordinary flu or an upset stomach and be overlooked by doctors or individuals.

# **B1: Strategy - Establish Protective Standards**

**Target #1:**Priority programs for safe sanitary practices are up to date by 2008. **Measure #1:** Revisions to priority programs for safe sanitary practices are % complete (4 yr Strategic Plan).

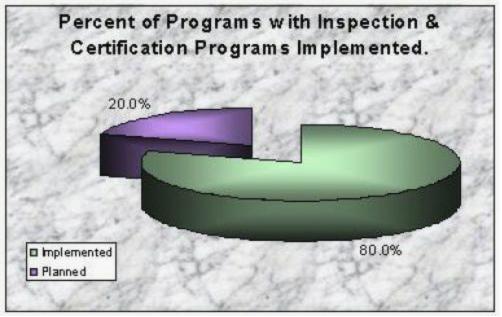


**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health will be protected. We do this by influencing external entities to utilize safe sanitary practices through a comprehensive protection program. We don't prevent unsafe sanitary practices – we influence others to take preventative action and establish standards by which to measure success.

This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects, and averaged over the department. Overall, at 96.0% completion, performance exceeds expected.

# **B2: Strategy - Control Sanitary Practices**

**Target #1:**Safe sanitary practice inspection and certification programs are implemented by FY2007. **Measure #1:** % of programs for inspection and certification for safe sanitary practices implemented by FY2007.



**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health will be protected. We do this by influencing external entities to utilize safe sanitary practices through a comprehensive protection program. We don't prevent unsafe sanitary practices – we influence others to take preventative action and establish inspection and certification programs by which to measure success.

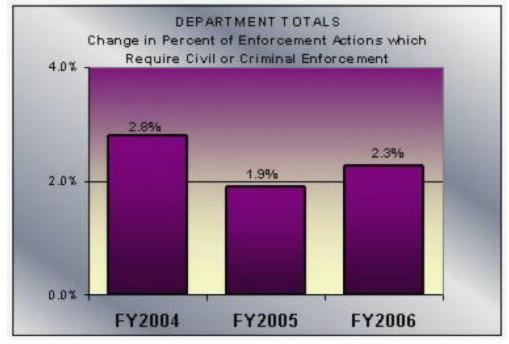
These programs are established to allow us to document compliance.

The measure summarizes department progress with development and implementation of planned programs. It is expected that all programs will be complete by the end of FY2007.

# **B3: Strategy - Enforce Controls for Safe Sanitary Practices**

**Target #1:**The percent of total enforcement actions that require civil or criminal enforcement to return the regulated community to compliance is reduced.

Measure #1: Change in percent of total enforcement actions that require civil or criminal enforcement.



**Analysis of results and challenges:** The Alaska Department of Environmental Conservation has primary responsibility for the enforcement of laws governing the protection of citizens from unsafe sanitary practices. Normally these laws are enforced by the regulatory staff through administrative or civil remedies.

Protecting public health requires that we establish protective standards and enforce those standards. The effectiveness of our enforcement programs can be measured by looking at voluntary compliance of the regulated community – compliance before legal action becomes necessary.

However, when harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered. In addition to threatening the quality of Alaska's environment, nearly all environmental crimes involve a risk to public health, now or in the future. Environmental crimes include: the illegal discharge of pollutants into Alaska's water sources; the improper disposal of solid or hazardous waste; and the illegal discharge of pollutants into the atmosphere.

In most instances DEC programs warn and always investigate violators prior to taking legal action. These actions are tracked in the environmental crimes database.

(For further information on administrative penalties or to view the FY2005 enforcement report – visit http://www.state.ak.us/dec/das/info\_services/pdfs/enfreport.pdf)

# **Prioritization of Agency Programs**

(Statutory Reference AS 37.07.050(a)(13))

Each division director was instructed to prioritize his or her program and submit the results to the Commissioner's Office. The Commissioner formed a group of senior management staff to review the divisions' priorities and convert them into departmental priorities. Program priorities were listed using the department's performance results for protecting the environment and protecting Alaskans from unsafe sanitary practices as the primary ranking criteria.

- 1. Commissioner's Office
- 2. Finance/Budget/Procurement

- 12. Office of the State Veterinarian
- 13. Emergency Response

#### Department of Environmental Conservation

- 3. Air Permitting Program
- 4. Network Services
- 5. Air Non-Point Mobile Sources and Monitoring Program 16. Pesticides
- 6. Drinking Water Safety Program7. Wastewater Permitting & Compliance Program
- 8. Food Safety and Sanitation
- 9. Water Quality Standards and Monitoring Program
- 10. Non-Point Source Pollution Permitting and Protection Program
- 11. Industry Preparedness

- 14. General Laboratory Services
- 15. Contaminated Sites
- 17. Solid Waste
- 18. Operator Certification Program
- 19. Environmental Crimes
- 20. Remote Maintenance Worker Program
- 21. Municipal Grants and Loans Program
- 22. Village Safe Water Program

# **Administration Results Delivery Unit**

# **Contribution to Department's Mission**

Provide administrative support and policy direction to the divisions in the department.

#### **Core Services**

- Develop partnerships and work cooperatively with the regulated community and other government and nongovernmental stakeholders to protect human health and the environment.
- Lead department employees to accomplish department priorities and performance measures.
- Represent the department's authorities and responsibilities on the Governor's cabinet.
- Work with the legislature on the department's budget and legislative priorities.
- Represent the department's authorities and responsibilities on the Exxon Valdez Trustees Council.
- · Adjudicate administrative appeals of department decisions.
- Approve department regulations for public notice and adopt final regulation changes for filing with the Lieutenant Governor.
- Provide administrative support services to customers and clients of the department.
- Develop and implement sound administrative policies and practices for the department.
- Provide timely and accurate information.
- Minimize risk from operations.
- Enforce protective standards for environmental and sanitary practices.

| End Results  | Strategies to Achieve Results  |
|--|--|
| A: Effective, efficient administrative support.  Target #1: 90% of survey respondents rate support services at acceptable or higher.  Measure #1: % of survey respondents rate support services at acceptable or higher. | A1: Lead development and implementation of Department initiatives.  Target #1: Strategic Plan is 100% implemented by fiscal year 2008.  Measure #1: % of Strategic Plan implemented.  A2: Improve availability, quality, and quantity of data for external and internal users.  Target #1: Network is available to employees 7 days a week.  Measure #1: % of time network is available.  A3: Ensure compliance with all federal and state requirements.  Target #1: 100% of audit exceptions investigated and successfully resolved.  Measure #1: % of audit exceptions investigated and successfully resolved. |
|  | A4: Investigate criminal violations.  Target #1: Criminal violations are investigated and successfully resolved.  Measure #1: % of criminal investigations successfully investigated and resolved.   |

# **Major Activities to Advance Strategies**

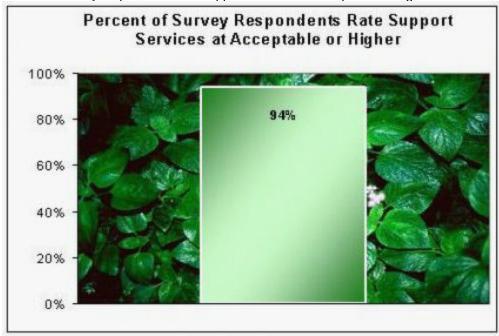
- Lead the department to accomplish goals and communicate performance.
- Lead the development of protective standards.
- Work within the government and with stakeholders, the public and the legislature to communicate department
   initiatives and needs.
- Develop and maintain support services for the department's customers and clients; other agencies, the legislature and department employees.
- Identify departmental training needs and develop training plans.
- Develop enforcement procedures for departmental permitting programs.
- Develop and maintain policies and procedures governing financial, budget, procurement and information systems management.

| FY2008 Resources Allocated to Achieve Results |                                |  |
|---|--------------------------------|--|
| Personnel: Full time                          | 57                             |  |
| Part time                                     | 0                              |  |
| Total   | 57                             |  |
|   | Personnel: Full time Part time |  |

#### **Performance Measure Detail**

#### A: Result - Effective, efficient administrative support.

**Target #1:**90% of survey respondents rate support services at acceptable or higher. **Measure #1:** % of survey respondents rate support services at acceptable or higher.



**Analysis of results and challenges:** This survey is done on a three year cycle. Results from a survey taken in FY2005 show that 94% of the Division's customers are satisfied with the support services being provided. Results will be updated with a new survey in FY2008.

# A1: Strategy - Lead development and implementation of Department initiatives.

**Target #1:**Strategic Plan is 100% implemented by fiscal year 2008.

Measure #1: % of Strategic Plan implemented.

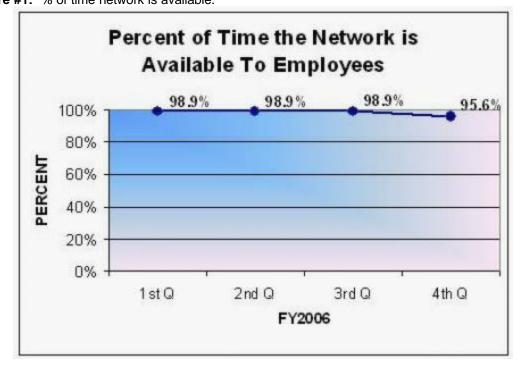


Analysis of results and challenges: DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action and establish standards by which to measure success.

This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects, and averaged over the department. Within the strategic plan, performance exceeds expectations.

# A2: Strategy - Improve availability, quality, and quantity of data for external and internal users.

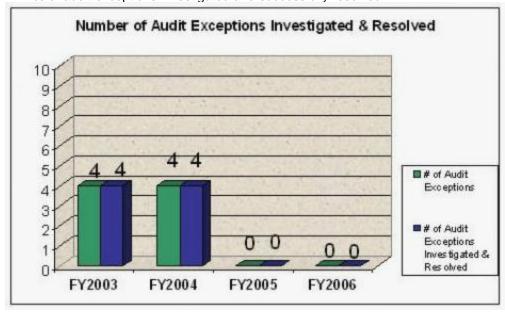
**Target #1:**Network is available to employees 7 days a week. **Measure #1:** % of time network is available.



Analysis of results and challenges: During FY2006 the Network Services Section was able to successfully provide network services 7 days a week. The results were based on the uptime of 17 critical department servers providing file and print, mail, and web services. A full day of network downtime was counted any time at least 1 server was down for more than 8 hours. Routine maintenance downtime was limited to short periods during the off hours.

# A3: Strategy - Ensure compliance with all federal and state requirements.

**Target #1:**100% of audit exceptions investigated and successfully resolved. **Measure #1:** % of audit exceptions investigated and successfully resolved.

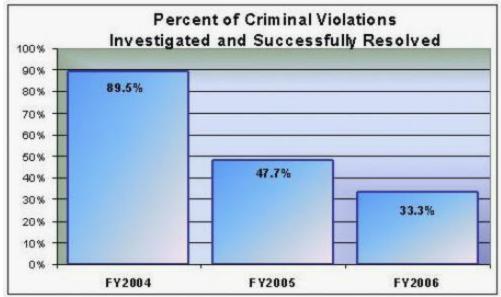


**Analysis of results and challenges:** Data for this measure is available on an annual basis only. The statewide single audit is performed annually and results are published upon completion. Quarterly data is therefore not available.

The statewide single audit results for FY2006 will not be available until September of 2007.

# A4: Strategy - Investigate criminal violations.

**Target #1:**Criminal violations are investigated and successfully resolved. **Measure #1:** % of criminal investigations successfully investigated and resolved.



Analysis of results and challenges: Normally environmental violations are enforced by ADEC's regulatory staff

through administrative or civil remedies. However, when harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered.

The Environmental Crimes Unit is responsible for investigating the most complex and egregious violations of environmental law. Violators must be identified and sufficient evidence collected in order to successfully resolve an investigation. The effectiveness of this unit can be measured by its ability to successfully resolve a high percentage reported criminal violations.

There were 21 criminal investigations initiated by the Environmental Crimes unit in fiscal year 2006. Of those 21 investigations 7 have been resolved and the remaining 14 were still under investigation at the end of this reporting period. Due to the complexities of many of these investigations, they are not resolved in the same fiscal year as reported, but will be resolved in the following fiscal year. The percentage of FY2005 investigations resolved increased to 47.7% and the percentage of FY2004 investigations resolved increased to 89.5%.

# **Component: Office of the Commissioner**

# **Contribution to Department's Mission**

Provide support and policy direction to the divisions in the department.

#### **Core Services**

- Develop partnerships and work cooperatively with the regulated community and other government and non-governmental stakeholders to protect human health and the environment.
- Lead department employees to accomplish department priorities and performance measures.
- Represent the department's authorities and responsibilities on the Governor's cabinet.
- Work with the legislature on the department's budget and legislative priorities.
- Represent the department's authorities and responsibilities on the Exxon Valdez Trustees Council.
- Adjudicate administrative appeals of department decisions.
- Approve department regulations for public notice and adopt final regulation changes for filing with the Lieutenant Governor.

| End Results  | Strategies to Achieve Results  |
|--|--|
| A: The department operates in accordance with the Administration's policies and initiatives.                     | A1: Lead development and implementation of Department initiatives.   |
| Target #1: Strategic Plan is 100% implemented by fiscal year 2008.  Measure #1: % of Strategic Plan implemented. | Target #1: Annual approval of 100% the department's budget request by the legislature.  Measure #1: % of the department's proposed budget request approved by the legislature. |
|  | <u>Target #2:</u> All priority regulatory programs are revised for filing with the Lieutenant Governor's Office. <u>Measure #2:</u> % of completed priority program revisions. |

# **Major Activities to Advance Strategies**

- Lead the department to accomplish goals and communicate performance.
- Lead the development of protective standards.
- Work within the government and with stakeholders, the public and the legislature to communicate department initiatives and needs.

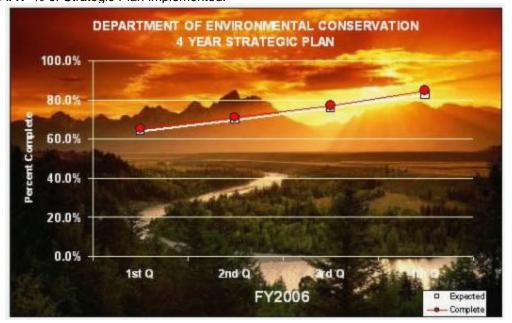
| FY2008 Resources Allocated to Achieve Results |                         |    |
|---|-------------------------|----|
| FY2008 Component Budget: \$1,147,300          | Personnel:<br>Full time | 10 |
|   | Part time               | 0  |
|   | Total                   | 10 |
|   |                         |    |

#### Performance Measure Detail

# A: Result - The department operates in accordance with the Administration's policies and initiatives.

Target #1:Strategic Plan is 100% implemented by fiscal year 2008.

Measure #1: % of Strategic Plan implemented.

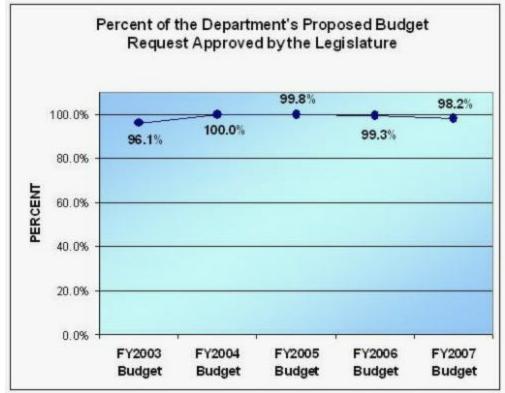


**Analysis of results and challenges:** DEC's strategic framework is based on the premise that, if we fulfill our duties (statutorily mandated) and accomplish our mission, the ultimate result will be that public health and the environment will be protected. We do this by influencing external entities to prevent abate or control pollution through a comprehensive protection program. We don't prevent pollution – we influence others to take preventative action and establish standards by which to measure success.

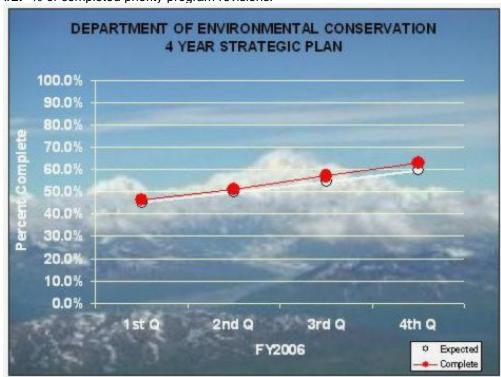
This measure determines departmental progress against the 4 Year Strategic Plan. Progress is measured against expected results for individual projects, and averaged over the department. Within the strategic plan, performance exceeds expectations.

# A1: Strategy - Lead development and implementation of Department initiatives.

**Target #1:**Annual approval of 100% the department's budget request by the legislature. **Measure #1:** % of the department's proposed budget request approved by the legislature.



**Analysis of results and challenges:** This measure is reported annually. Budget activity for the upcoming fiscal year is usually complete by the middle of May, with data available for end of year reporting.



**Target #2:** All priority regulatory programs are revised for filing with the Lieutenant Governor's Office. **Measure #2:** % of completed priority program revisions.

**Analysis of results and challenges:** All of the department's highest priority regulation revisions were completed and filed with the Lieutenant Governor.

# **Component: Information and Administrative Services**

# **Contribution to Department's Mission**

Provide support services to departmental programs.

#### **Core Services**

- Provide administrative support services to customers and clients of the department.
- Develop and implement sound administrative policies and practices for the department.
- Provide timely and accurate information.
- Minimize risk from operations.
- Enforce protective standards for environmental and sanitary practices.

| End Results  | Strategies to Achieve Results   |
|--|---|
| A: Administrative activities are in compliance with governing statutes and regulations.  | A1: Improve availability, quality, and quantity of data for external and internal users.  |
| Target #1: 100% of audit exceptions investigated and successfully resolved.  Measure #1: % of audit exceptions investigated and successfully resolved. | Target #1: Network is available to employees 7 days a week.  Measure #1: % of time network is available.  A2: Ensure compliance with all federal and state requirements.  |
|  | Target #1: No audit exceptions.  Measure #1: Number of audit exceptions.  Target #2: No procurement violations for procurements over \$1,000.  Measure #2: % of violations as compared with total number of procurements made over \$1,000. |
|  | A3: Investigate criminal violations.  Target #1: Criminal violations are investigated and successfully resolved.  Measure #1: % of criminal violations investigated and successfully resolved.  |

# **Major Activities to Advance Strategies**

- Develop and maintain support services for the department's customers and clients; other agencies, the legislature and department employees.
- Identify departmental training needs and develop training plans.
- Develop enforcement procedures for departmental permitting programs.
- Develop and maintain policies and procedures governing financial, budget, procurement and information systems management.

| FY2008 Resources Allocated to Achieve Results |                      |    |
|---|----------------------|----|
| FY2008 Component Budget: \$4,639,800          | Personnel: Full time | 47 |
|   | Part time            | 0  |
|   | Total                | 47 |
|   |                      |    |

#### **Performance Measure Detail**

A: Result - Administrative activities are in compliance with governing statutes and regulations.

**Target #1:**100% of audit exceptions investigated and successfully resolved. **Measure #1:** % of audit exceptions investigated and successfully resolved.



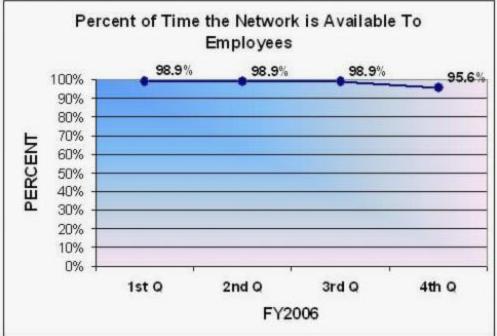
**Analysis of results and challenges:** Data for this measure is available on an annual basis only. The statewide single audit is performed annually and results are published upon completion. Quarterly data is therefore not available.

The statewide single audit for FY2005 is anticipated to be released in November, 2006. There are no new exceptions for FY2005. Additionally, none of the prior years' audit exceptions were restated in the FY2005 results, and all prior years' audit exceptions are now considered resolved. The statewide single audit results for FY2006 will not be available until September of 2007.

# A1: Strategy - Improve availability, quality, and quantity of data for external and internal users.

Target #1:Network is available to employees 7 days a week.

Measure #1: % of time network is available.

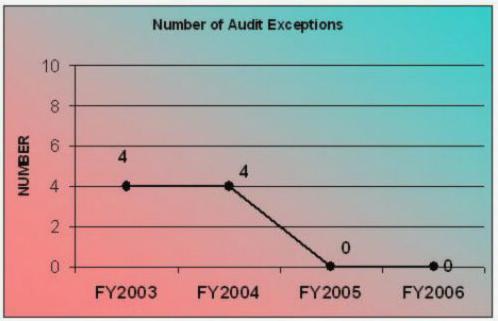


Analysis of results and challenges: During FY2006 the Network Services Section was able to successfully provide network services 7 days a week. The results were based on the uptime of 17 critical department servers providing file and print, mail, and web services. A full day of network downtime was counted any time at least 1 server was down for more than 8 hours. Routine maintenance downtime was limited to short periods during the off hours.

# A2: Strategy - Ensure compliance with all federal and state requirements.

Target #1:No audit exceptions.

Measure #1: Number of audit exceptions.



**Analysis of results and challenges:** Data for this measure is available on an annual basis only. The statewide single audit is performed annually and results are published upon completion. Quarterly data is therefore not available.

The statewide single audit results for FY2006 will not be available until September of 2007.

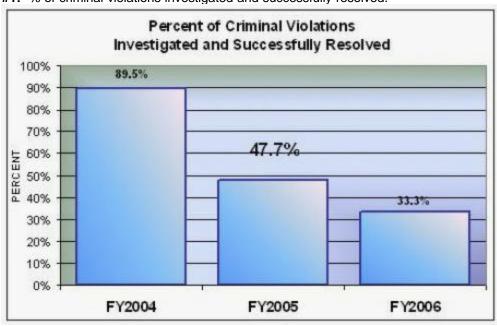


**Target #2:**No procurement violations for procurements over \$1,000. **Measure #2:** % of violations as compared with total number of procurements made over \$1,000.

**Analysis of results and challenges:** The goal is to have all procurements over \$1,000 reviewed and processed by procurement staff. In FY2006 659 out of 676 procurements over \$1,000 were made without any violations.

# A3: Strategy - Investigate criminal violations.

**Target #1:**Criminal violations are investigated and successfully resolved. **Measure #1:** % of criminal violations investigated and successfully resolved.



**Analysis of results and challenges:** Normally environmental violations are enforced by ADEC's regulatory staff through administrative or civil remedies. However, when harmful conduct becomes intentional, knowing, or reckless, criminal enforcement must be considered.

The Environmental Crimes Unit is responsible for investigating the most complex and egregious violations of environmental law. Violators must be identified and sufficient evidence collected in order to successfully resolve an investigation. The effectiveness of this unit can be measured by its ability to successfully resolve a high percentage reported criminal violations.

There were 21 criminal investigations initiated by the Environmental Crimes unit in fiscal year 2006. Of those 21 investigations, 7 have been resolved and the remaining 14 were still under investigation at the end of this reporting period. Due to the complexities of many of these investigations, they are not resolved in the same fiscal year as reported, but will be resolved in the following fiscal year. The percentage of FY2005 investigations resolved increased to 47.7% and the percentage of FY2004 investigations resolved increased to 89.5%.

# **Environmental Health Results Delivery Unit**

# **Contribution to Department's Mission**

Safe drinking water, food, and sanitary practices.

# **Core Services**

- Establish clear standards.
- Apply standards consistently statewide.
- Permit, inspect and provide technical assistance.
- Enforce requirements.

| End Results   | Strategies to Achieve Results  |
|---|--|
| A: The environment is protected from solid waste and pesticide pollution.   | A1: Establish protective standards for Solid Waste and Pesticides.   |
| Target #1: 100% of solid waste facilities are authorized/permitted.  Measure #1: % of facilities that are authorized/permitted.   | Target #1: Solid waste regulations are revised, adopted and implemented by FY2008.  Measure #1: % of solid waste regulations and standards complete.   |
|   | <u>Target #2:</u> Pesticide regulations are revised, adopted and implemented by the end of FY2007. <u>Measure #2:</u> % of pesticide regulations and standards complete.   |
| End Results   | Strategies to Achieve Results  |
| B: Citizens are protected from unsafe food and drinking water.  | B1: Establish protective standards for food and drinking water.  |
| Target #1: No outbreaks of food borne illness in regulated facilities.  Measure #1: Number of regulated facilities with food borne outbreaks within the fiscal year.  Target #2: No public illness outbreaks from regulated public water systems.  Measure #2: Number of regulated facilities with public illness outbreaks within the fiscal year. | Target #1: Protective standards for food are complete by the end of FY2007.  Measure #1: % of protective standards complete for food.  B2: Control sanitary practices for food and drinking water.  Target #1: 100% plan reviews are processed within specific turn around times.  Measure #1: % reviews processed within specific turn around time.  Target #2: 100% of food handlers and sanitary survey inspectors are certified.  Measure #2: % of food handlers and sanitary survey inspectors are certified.  B3: Enforce safe sanitary practices for food and drinking water. |

<u>Target #1:</u> Within a fiscal year, less than 10% of regulated facilities have been issued formal enforcement.

<u>Measure #1:</u> % of regulated facilities issued formal enforcement within the fiscal year.

# **Major Activities to Advance Strategies**

- Test and monitor food products for safety.
- Assist food operators to be in compliance with the Alaska Food Code.
- Provide environmental health information by conducting
   laboratory tests and analysis.
- Develop and maintain foreign animal disease monitoring and surveillance.
- Regulate community water systems.

- Implement a risk-based inspection and compliance plan for landfills.
- Conduct compliance investigations and inspections.
- Enforce environmental health regulatory requirements.
  - Investigate complaints and outbreaks.

| FY2008 Resources Allocated to Achieve Results |                                |  |
|---|--------------------------------|--|
| Personnel:<br>Full time                       | 141                            |  |
| Part time                                     | 0                              |  |
| Total   | 141                            |  |
| 1   | Personnel: Full time Part time |  |

#### **Performance Measure Detail**

#### A: Result - The environment is protected from solid waste and pesticide pollution.

**Target #1:**100% of solid waste facilities are authorized/permitted.

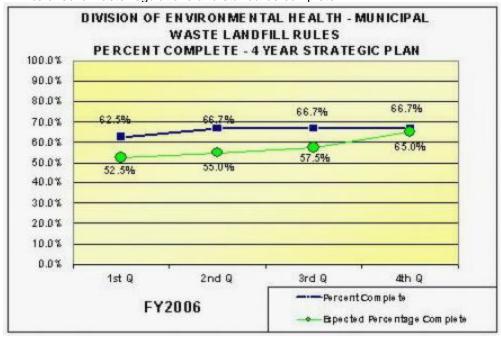


**Analysis of results and challenges:** The Solid Waste Program oversees permitting municipal landfills receiving over 5 tons of waste per day (Class I and Class II landfills) and industrial activities that require permitting. The

program tracks the number of Class I, Class II, and industrial permits and the number of facilities requiring permits. All of the facilities required to be permitted are either permitted or in the process of obtaining new permits or renewing the necessary permit.

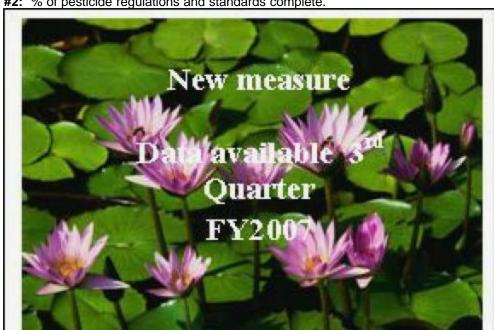
## A1: Strategy - Establish protective standards for Solid Waste and Pesticides.

**Target #1:** Solid waste regulations are revised, adopted and implemented by FY2008. **Measure #1:** % of solid waste regulations and standards complete.



Analysis of results and challenges: The Solid Waste Program effectively manages waste disposal in communities that produce more than 5 tons of municipal solid waste per day by issuing individual permits to the landfills serving those communities. Currently, small communities producing less than 5 tons of municipal solid waste per day are also required to have a permit but only 25% of the Class III communities have permitted landfills. Since the permit process is difficult for small communities with limited resources, a simplified authorization process is needed to improve the permitting rate among small communities. As such, the department is in the process of changing the structure of the solid waste program.

As a first step in this process, legislation was requested and passed in 2004 that gave DEC the ability to authorize disposal activities by regulation (i.e. prior authorization) rather than solely by permit. To utilize this new authority, it is necessary to revise the solid waste regulations. Efforts to revise the regulations have proceeded steadily and a draft package of revised regulations was completed by the end of FY2005. Much of FY2006 was spent on internal review of the draft regulations and revision of the regulations in response to review comments. Internal review of the revised draft regulations is currently underway.



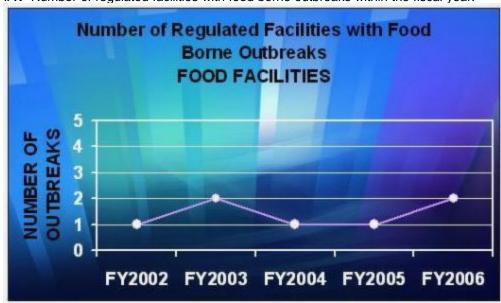
**Target #2:** Pesticide regulations are revised, adopted and implemented by the end of FY2007. **Measure #2:** % of pesticide regulations and standards complete.

**Analysis of results and challenges:** This is a new Target & Measure for FY2007 - Data will be available during the 3rd Quarter of FY2007.

## B: Result - Citizens are protected from unsafe food and drinking water.

Target #1:No outbreaks of food borne illness in regulated facilities.

Measure #1: Number of regulated facilities with food borne outbreaks within the fiscal year.

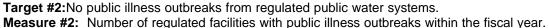


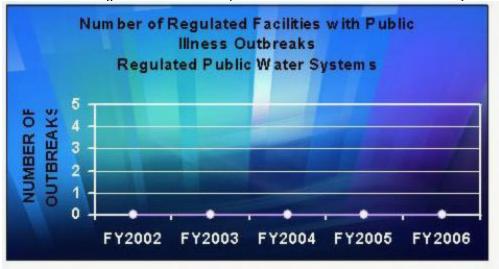
Analysis of results and challenges: The Epidemiology section of Health and Social Services (HSS) conducts

investigations of outbreaks of human illness and death and, with the help of DEC investigators, determines the source of the outbreak. On a routine basis, Environmental Health Officers investigate cases of suspected food borne illness in coordination with the Department of Health and Social Services. Investigation requires Food Safety staff to take food case histories and conduct risk focused inspections of regulated food establishments to determine if food preparation, handling, source, or employee health may be the causative or contributing factors for the illness. The measure does not include illness determined through investigation to be a result of norovirus infections associated with food and sanitation practices, or food borne illness which results from consumer mishandling of retail food.

Data displayed here reflects the number of food facilities regulated by DEC that were determined to be the source of an outbreak during the reporting period.

While outbreaks reported to HSS can be tracked, many incidents of illness related to food may never actually get reported. In milder cases, symptoms may be mistaken for ordinary flu or an upset stomach and be overlooked by doctors or individuals.



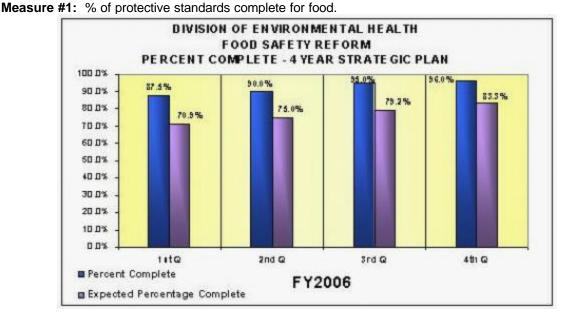


**Analysis of results and challenges:** The Epidemiology section of Health and Social Services (HSS) conducts investigations of outbreaks of human illness and death and, with the help of DEC investigators, determines the source of the outbreak. Data displayed here reflects the number of food facilities regulated by DEC that were determined to be the source of an outbreak during the reporting period.

While outbreaks reported to HSS can be tracked, many incidents of illness related to food may never actually get reported. In milder cases, symptoms may be mistaken for ordinary flu or an upset stomach and be overlooked by doctors or individuals.

## B1: Strategy - Establish protective standards for food and drinking water.

Target #1:Protective standards for food are complete by the end of FY2007.



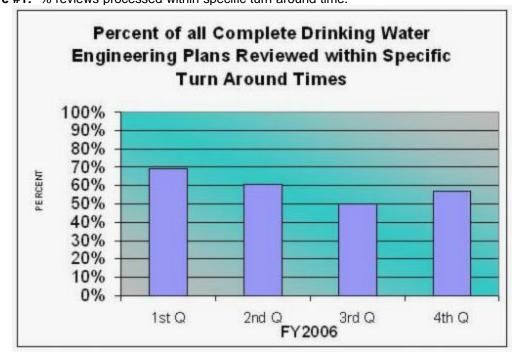
Analysis of results and challenges: The Food Safety and Sanitation Program has actively been working on revisions to the Alaska Food Code (18 AAC 31) to implement HB378, the bill providing authority to require certified food protection managers and food worker cards in Alaska's regulated food establishments. The program released a draft for public comment on January 12, 2005 and held numerous public workshops to discuss the package. The program received comments from approximately 75 operators regarding employee health, fines for non-compliance, no bare hand contact with ready-to-eat foods, and Active Managerial Control record tracking requirements.

The program made extensive edits based upon public comments. A second public comment period was held April 2, 2006 through June 30, 2006. Four public workshops were held to educate operators and other interested parties about the proposed regulation changes.

The program routed the adoption draft to the Department of Law in late summer 2006. The regulations will become effective 30 days after they are filed by the Lieutenant Governor.

## B2: Strategy - Control sanitary practices for food and drinking water.

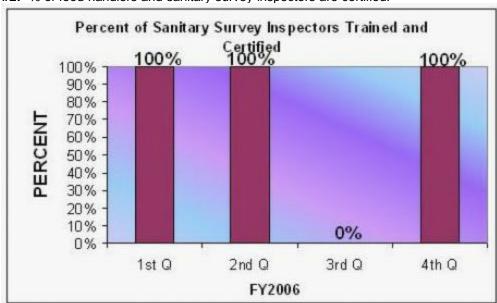
**Target #1:**100% plan reviews are processed within specific turn around times. **Measure #1:** % reviews processed within specific turn around time.



Analysis of results and challenges: Waterborne disease continues to be a threat to public health in many areas. To provide for the protection of public health, the Drinking Water Regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified that engineering plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineering review process, the engineer will determine if specifications and materials used in the construction or modification of a PWS meet criteria of the Drinking Water Regulations. These criteria address many items that, taken together, best protect public health and provide safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineering plan submittals within 30 days of receipt.

Due to the complexity of the systems and the importance of protecting people from waterborne disease, the engineering plan review process is also complex. Many engineering plan submittals do not contain required information, needed by department engineers in order to begin the review process. Submitting incomplete engineered plans increases the review process timeline. ADEC anticipates conducting an Advanced Sanitary Survey class and other outreach sessions on new and upcoming rule implementation, as well as implementation of new engineered plan submittal checklists to assist in reducing the time necessary for clarification and technical assistance.

This measure will fluctuate with unplanned vacancies and/or implementation of new complex federal rules requiring equally complex changes to the public drinking water systems. During the reporting period there was a decrease in the number of plans reviewed within 30 days of initial receipt because of: 1) An increase in the number of public water system plans received; 2) An increase in complexity of public water system plans received, which can be attributed to the new Long Term 1 Enhanced Surface Water Treatment and Stage 1 Disinfectants/Disinfection byproducts Rules; and, 3) Vacancies and recently hired new and inexperienced engineering staff.



**Target #2:**100% of food handlers and sanitary survey inspectors are certified. **Measure #2:** % of food handlers and sanitary survey inspectors are certified.

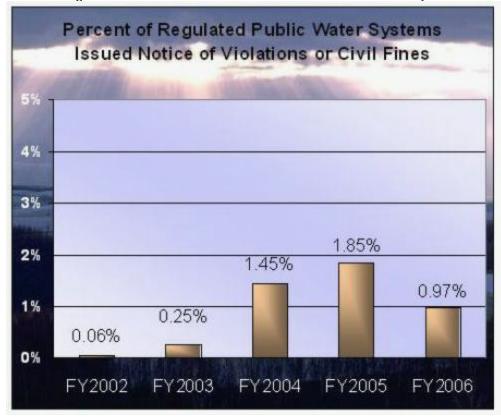
**Analysis of results and challenges:** This measure combines the certification programs within the Food Safety and Drinking Water Programs. The certification of food handlers is part of the new food safety system and will be implemented in FY2008. Following implementation, data for the food handlers will be included in the measure. Current data only includes certification of sanitary survey inspectors.

All federally regulated public water systems are required to conduct a periodic sanitary survey of their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and operation and maintenance procedures of a public water system. The sanitary survey is used to evaluate the adequacy of the system and helps to determine if it can produce and distribute safe drinking water. Sanitary surveys are required every five years for public water systems using a groundwater source and every three years for public water systems using a surface water source. Most public water systems are very complex, with many individual components that must be inspected during the sanitary survey. The complexity of inspecting the public water system and the protection of public health require that a person conducting a sanitary survey be knowledgeable in all aspects of drinking water treatment and distribution. This requires extensive and specialized training. There are approximately 1,600 federally regulated public water systems in Alaska that must meet the sanitary survey requirement. Not all sanitary surveys can be completed by department staff, so the Drinking Water Program has contracted with the University of Alaska Southeast Alaska Training/Technical Assistance Center (ATTAC) to provide training sessions for both department staff and other third party individuals who have prior experience with public water system treatment and distribution. ATTAC currently offers at least three training sessions per year, including two Basic Sanitary Survey classes and one Advanced Sanitary Survey class. The Drinking Water Program also plans to offer one Advanced Sanitary Survey class annually.

The data for the 1st, 2nd ,and 4th quarters of FY2006 shows that we have met our goal of 100% certification of food handlers and sanitary survey inspectors, however the 3rd quarter shows a 0%. This was due to having zero food handlers and sanitary inspectors being certified.

## B3: Strategy - Enforce safe sanitary practices for food and drinking water.

**Target #1:**Within a fiscal year, less than 10% of regulated facilities have been issued formal enforcement. **Measure #1:** % of regulated facilities issued formal enforcement within the fiscal year.



Analysis of results and challenges: This measure combines enforcement actions for regulated food establishments and regulated public water systems for two enforcement tools Notice of Violation (NOV) and the levy of civil fines and administrative penalties should a regulated entity not comply with standards. The information system to support compliance and enforcement for the new Food Safety Program, Active Managerial Control, is anticipated to be available by FY2007. Current data only includes enforcement actions associated with regulated drinking water systems.

The primary goal of the Drinking Water Program is to make sure that all people who are served by a federally regulated public water system are receiving drinking water that meets health-based standards. Health-based standards are designed to protect people from consuming unsafe drinking water and are enforceable in order for public water systems to be able to serve drinking water to the public. If a public water system does not meet these standards, violations occur and formal enforcement actions are taken against the system. Formal enforcement actions include NOVs and civil fines (administrative penalties). The goal of the Drinking Water Program is to have 100% of public water systems in compliance with health-based standards.

## **Component: Food Safety & Sanitation**

## **Contribution to Department's Mission**

Safe food processing, service, and sales.

#### **Core Services**

- Establish standards, permit, inspect, and enforce standards for food processing and food service facilities.
- Establish standards and inspect on a complaint basis certain public facilities for sanitation.
- Provide education and training on the safe handling of food.

| End Results  | Strategies to Achieve Results   |
|--|---|
| A: Establishments provide safe food.  Target #1: 100% of inspected retail food establishments operate under Active Managerial Control (AMC).  Measure #1: % of inspected retail food establishments operating under AMC. | A1: Protective standards are established for retail food safety.  Target #1: 100% of retail food safety standards are revised by the end of FY2007.  Measure #1: % of retail food safety standards revised by the end of FY2007.  A2: Develop information systems and implement program by the end of FY2007.  Target #1: Develop information systems by FY2006.  Measure #1: % developed by FY2006.  Target #2: Program implementation complete by the end of FY2007.  Measure #2: % of implementation complete by the end of FY2007.  A3: Enforce food safety program.  Target #1: Less than 10% of regulated retail food establishments have been issued Notice of Violation or civil fines within the fiscal year.  Measure #1: % of regulated retail food establishments issued Notice of Violation or civil fines within the fiscal year. |

## **Major Activities to Advance Strategies**

- Review plans and specifications for new food establishments.
- Inspect medium and high risk seafood and other food processors.
- Conduct random inspections and record audits of retail
   food establishments.
- Conduct complaint and outbreak investigations.
- Initiate enforcement action as required.

- Conduct sanitary surveys of shellfish growing areas.
- Monitor shellfish farms and harvesters for Vibrio parahaemolyticus, paralytic shellfish poisoning and other marine toxins and bacteria.
- Respond to fires, floods and other disasters.
- Detain or destroy contaminated food. Coordinate the recall of food products.
- Assist food operators to take more responsibility for

## **Major Activities to Advance Strategies**

Set sanitation standards for certain public facilities. food safety.

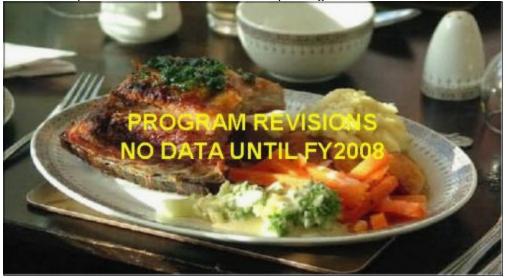
| FY2008 Resources Allocated to Achieve Results |                      |    |
|---|----------------------|----|
| FY2008 Component Budget: \$4,101,600          | Personnel: Full time | 38 |
|   | Part time            | 0  |
|   | Total                | 38 |

#### **Performance Measure Detail**

## A: Result - Establishments provide safe food.

Target #1:100% of inspected retail food establishments operate under Active Managerial Control (AMC).

Measure #1: % of inspected retail food establishments operating under AMC.



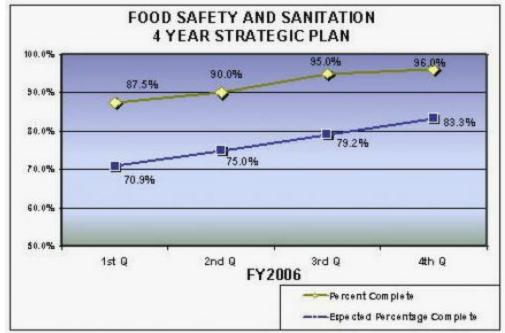
Analysis of results and challenges: The Food Safety Program has actively been working on revisions to the Alaska Food Code (18 AAC 31) to implement HB378, the bill providing authority to require a trained workforce which is a pre-requisite for Active Managerial Control. The program released the first draft for public comment on January 12, 2005. A second public comment period was held April 2, 2006 through June 30, 2006. Four public workshops were held to educate operators and other interested parties about the proposed regulation changes. The program plans to send the adoption draft to the Department of Law in late summer 2006. Regulations will become effective 30 days after they are filed by the Lieutenant Governor.

The program continues to test the information system that has been built for permit management and tracking and food worker training, testing, and card generation. Food worker training and testing will be available in multiple languages.

Meaningful data regarding the level of compliance will be available FY2008.

## A1: Strategy - Protective standards are established for retail food safety.

**Target #1:**100% of retail food safety standards are revised by the end of FY2007. **Measure #1:** % of retail food safety standards revised by the end of FY2007.



Analysis of results and challenges: The Food Safety and Sanitation Program has actively been working on revisions to the Alaska Food Code (18 AAC 31) to implement HB378, the bill providing authority to require certified food protection managers and food worker cards in Alaska's regulated food establishments. The program released a draft for public comment on January 12, 2005 and held numerous public workshops to discuss the package. The program received comments from approximately 75 operators regarding employee health, fines for non-compliance, no bare hand contact with ready-to-eat foods, and Active Managerial Control record tracking requirements.

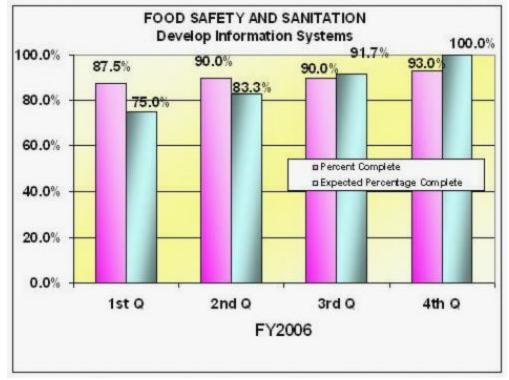
The program made extensive edits based upon public comments. A second public comment period was held April 2, 2006 through June 30, 2006. Four public workshops were held to educate operators and other interested parties about the proposed regulation changes.

The program routed the adoption draft to the Department of Law in late summer 2006. The regulations will become effective 30 days after they are filed by the Lieutenant Governor.

# A2: Strategy - Develop information systems and implement program by the end of FY2007.

Target #1:Develop information systems by FY2006.

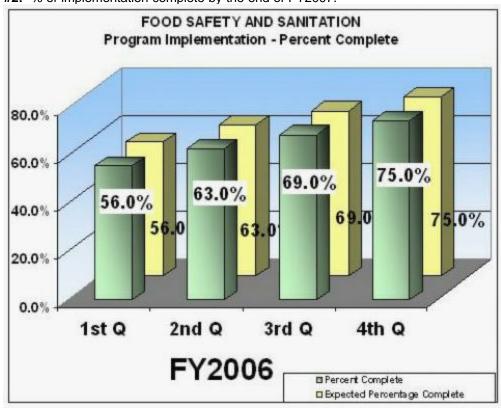
Measure #1: % developed by FY2006.



**Analysis of results and challenges:** The information management system includes modules for permit management and tracking, food worker training, testing, and card generation. The training and testing will be available in multiple languages.

The program has been actively working with a vendor to finalize the information management system. This development process has included standardizing and revising all program forms, converting existing data, producing on-line food safety education materials and tests and troubleshooting draft versions of the system.

The project was delayed by the need to reconsider policies and procedures that would result from adoption of proposed changes to the Alaska Food Code. The program continues to work toward completion of the project, and expects to have the complete integrated database and food worker training system on-line early in FY2007.



**Target #2:** Program implementation complete by the end of FY2007. **Measure #2:** % of implementation complete by the end of FY2007.

**Analysis of results and challenges:** Alaska's new retail food safety system, Active Managerial Control (AMC) is in the development phase. Regulations to facilitate implementation of AMC are expected to be adopted in early FY2007. These regulations require a trained workforce and encourage operators to implement effective food safety management systems that include written standard operating procedures and self-assessments. Program implementation is expected to be complete by the end of FY2007.

## A3: Strategy - Enforce food safety program.

**Target #1:**Less than 10% of regulated retail food establishments have been issued Notice of Violation or civil fines within the fiscal year.

Measure #1: % of regulated retail food establishments issued Notice of Violation or civil fines within the fiscal vear.



Analysis of results and challenges: The information system to support compliance and enforcement is anticipated to be available in early FY2007. Data regarding the level of compliance with food safety requirements will become available during FY2008, giving operators one year after regulations are final to come into compliance with certain new requirements. Initially, the percent of Notice of Violation's and civil fines may increase as the program is implemented and enforcement actions are initiated. Thereafter, the number of enforcement actions should decline as food operators and establishments more fully integrate. Active Managerial Control requirements.

## **Component: Laboratory Services**

## **Contribution to Department's Mission**

Provide analytical and technical information in support of state and national environmental health programs.

#### **Core Services**

- Inspect and certify private labs.
- Test food, water, seafood, shellfish, and domestic and wild animals.
- Analyze fish tissue for chemical, microbial, and marine toxin contaminants.
- Permit and inspect dairy and meat producers.
- Permit and monitor the movement of animals and animal vaccines.
- Monitor and control animal diseases.

| End Results   | Strategies to Achieve Results  |
|---|--|
| A: Information is available for assessment of risks to public health, welfare and the environment.        | A1: Provide information relating to risks associated with chemical and biological contaminants.  |
| Target #1: All requested tests are completed.  Measure #1: The % of tests requested that receive results. | Target #1: All requested tests for chemical and biological contaminants are complete.  Measure #1: The % of requested tests for contaminants that receive results.  A2: Provide information relating to risks associated |
|   | with animal diseases.  Target #1: All requested tests for animal diseases are complete.  Measure #1: The % of requested tests for animal   |
|   | diseases that receive results.  A3: Provide information relating risks associated with toxins.   |
|   | <u>Target #1:</u> All requested tests for toxins are complete. <u>Measure #1:</u> The % of requested tests for toxins that receive results.  |

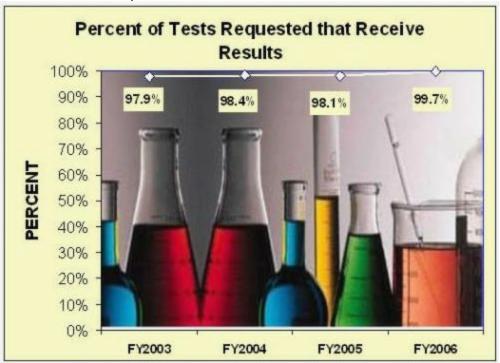
# Test shellfish and seafood. Test food and drinking water samples. Evaluate fish for persistent organic pollutants. Test animals. Review and certify private labs annually. Train EH staff on drinking water sampling and testing protocols annually. Screen and/or inspect dairy farms and processors. Issue animal health certificates. Investigate animal disease complaints and outbreaks.

| FY2008 Resources Al                  | located to Achieve Result | :s |
|--------------------------------------|---------------------------|----|
| FY2008 Component Budget: \$3,061,100 | Personnel: Full time      | 24 |
|                                      | Part time                 | 0  |
|                                      | Total                     | 24 |
|                                      |                           |    |

#### Performance Measure Detail

A: Result - Information is available for assessment of risks to public health, welfare and the environment.

**Target #1:** All requested tests are completed. **Measure #1:** The % of tests requested that receive results.

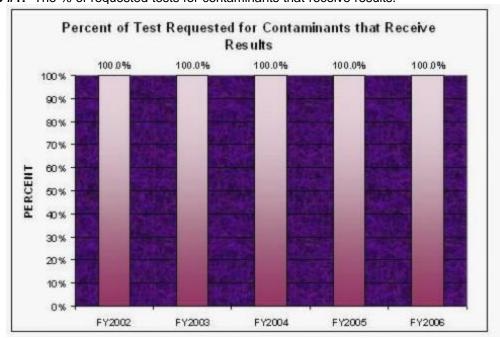


**Analysis of results and challenges:** The Environmental Health Laboratory's Target is to provide optimal customer service in the form of accurate, timely, and reliable results for 100% of the requests received. In addition to performing both biological and chemical analysis, the laboratory will continue to perform certification inspections for drinking water and environmental testing laboratories throughout the state.

During FY2006 a new state-of-art testing Environmental Health Laboratory with enhanced testing capabilities was constructed. The new facility includes testing labs for seafood toxins, bacteriology, immunology, dairy, animal diagnostics, chemical analysis, and molecular biology. New processes were developed and implemented during FY2006. They included: a Quality Management Program, Safety Program, Security Program, Laboratory Information Management System, Animal Diagnostic Program, and Molecular Biology Program. The transition from Palmer to Anchorage was completed in December of 2005.

# A1: Strategy - Provide information relating to risks associated with chemical and biological contaminants.

**Target #1:**All requested tests for chemical and biological contaminants are complete. **Measure #1:** The % of requested tests for contaminants that receive results.



Analysis of results and challenges: Mercury testing of fish tissues is the primary testing activity for this measure. Because Alaska is a leading producer world wide for seafood, methyl mercury in fish has become a high profile issue. The Division of Environmental Health is the regulatory agency responsible for assuring the safety of commercially harvested fish for national and international markets, as well as subsistence and sport fish consumers.

The toxicity of mercury to man and animals in large doses is well known and has a long history. Mercury is a naturally occurring element and widely distributed in the environment. Ores bearing mercury are mined worldwide and the refined mercury used in many commercial applications. Mercury is also found in trace quantities in fossil fuels such as coal and released into the environment when burned. With the advancement of science and refined measuring techniques for mercury, trace amounts were detected in the environment but more importantly, found in the water and food that we consume.

Mercury that enters the food chain is of particular concern due to its more toxic organic form as methyl mercury. The more toxic compound is formed when bacteria, for unknown reasons, convert elemental mercury to methyl mercury. Once this conversion to methyl mercury takes place the mercury is now in a form that is known to bioaccumulate. This bioaccumulation factor becomes significant among predatory fish and animals, with man being the top predator in the food chain.

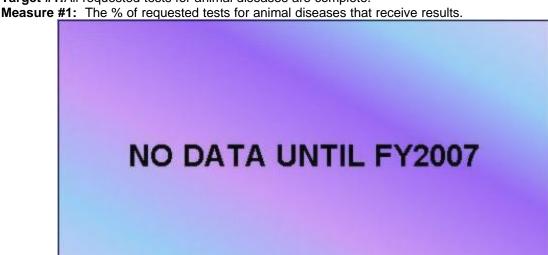
The significance of methyl mercury in fish became a concern more than 30 years ago. The US Food and Drug Administration set a regulatory level of 1ppm (part per million) for fish entering commerce. At the time this was considered a safe level for food consumption. Recent studies by the World Health Organization, US Environmental Protection Agency and private organizations indicate that the 1ppm level may not protect all segments of the population, particularly children, expectant mothers and women of child bearing age who consume fish on a regular basis.

Although there is little that can be done from the regulatory standpoint to eliminate the methyl mercury issue, it is the Division of Environmental Health's responsibility to provide information through laboratory testing that will identify problems if lower regulatory levels are imposed. The accumulation of methyl mercury data for all species of fish will also allow consumers to make informed choices for consumption of Alaska fish. The Division's

Environmental Health Laboratory began collecting data in 1997 and is gradually expanding its data base on the many fish indigenous to Alaska, both freshwater and saltwater species. As this data becomes available, it is viewable to the public on the Division's web page.

## A2: Strategy - Provide information relating to risks associated with animal diseases.

**Target #1:**All requested tests for animal diseases are complete.



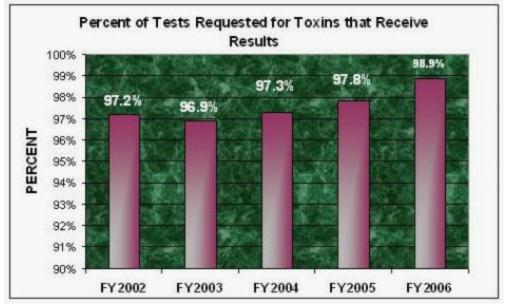
Analysis of results and challenges: This strategy provides the State of Alaska with the initial framework to monitor farm animals and wildlife for emerging diseases. Subsequent to the first reported case of "mad cow" disease in the United States, it has become more critical for the State Environmental Health Laboratory to develop the capability to test for various Transmissible Spongiform Encephalopathy (TSEs). Currently the Laboratory has been certified by USDA to perform Avian Influenza testing on samples collected from birds.

More animal tissue examination and molecular testing using DNA amplification will be possible in the future. It is expected that this testing scheme will be expanded from Chronic Wasting Disease (CWD) surveillance in wild game to Bovine Spongiform Encephalopathy (BSE) "mad cow" and scrappies surveillance in domestic animals. Data for this measure will be available mid FY2007.

## A3: Strategy - Provide information relating risks associated with toxins.

Target #1:All requested tests for toxins are complete.

Measure #1: The % of requested tests for toxins that receive results.



Analysis of results and challenges: Paralytic Shellfish Poison (PSP) toxins are toxins produced by microscopic organisms that accumulate in shellfish through their natural feeding processes. These toxins affect humans, other mammals, and possibly birds when toxic shellfish are ingested. There is no known antidote once a person has ingested shellfish containing these toxins, nor is there any way of knowing, just from looking, whether or not a particular shellfish is toxic. If the person can be diagnosed soon enough after presenting with symptoms and can be placed on a respirator, the body will eventually cleanse itself of the toxins. The current method for detecting and quantifying these toxins is the mouse bioassay using extracts prepared by an AOAC (Association of Official Analytical Chemists) approved method. A chemistry procedure using High Pressure Liquid Chromatography (HPLC) was recently approved by AOAC and will become the new method of choice at the Environmental Health Laboratory in Anchorage.

Using a graduated uniform sampling plan, shellfish from commercial shellfish growing areas are routinely tested for these toxins. Since the department started the testing program in the early 1980's, no known illnesses have occurred from commercially harvested Alaskan grown shellfish.

All samples submitted to the laboratory are assigned a number and nearly all samples are tested. Although the intent is to test 100% of the samples received, occasionally samples are submitted in a decomposed condition that prevents testing; or the submitter will request that the sample not be tested for a variety of reasons. These factors would account for a percent completion being less than 100%.

## **Component: Drinking Water**

## **Contribution to Department's Mission**

Verify safe drinking water.

#### **Core Services**

- Maintain state primacy for regulating public drinking water systems.
- Enforce public water system (PWS) monitoring requirements for drinking water contaminants.
- Review construction, installation, and operation plans for PWS to protect public health.
- Assist PWS owners in identifying the sources of their drinking water and help them develop strategies to
  effectively protect those sources from contamination.
- Provide technical and compliance assistance to PWS owners and operators, and the public.

| End Results   | Strategies to Achieve Results  |
|---|--|
| A: Drinking water is safe.  Target #1: Increase the % of drinking water engineering plans that can be approved within 30 days from initial receipt.  Measure #1: Change in the % of plans that can be approved within 30 days from initial receipt.  Target #2: 100% of the population served by public water systems (PWS) in compliance with health-based standards.  Measure #2: % of the population served by public water systems (PWS) in compliance with health-based standards. | A1: Timely review of all complete drinking water engineering plans submitted.  Target #1: Review all complete submissions of drinking water engineering plans within a 30 day time frame.  Measure #1: % of all complete plans reviewed within 30 days of receipt.  A2: Implement sanitary survey requirements for all federally regulated public water systems.  Target #1: 100% of public water systems file required sanitary surveys according to schedule.  Measure #1: % of public water systems in compliance with their sanitary survey schedule.  A3: Train and certify third party sanitary survey inspectors.  Target #1: 100% of the sanitary survey inspectors are trained and certified. |
|   | Measure #1: % of the sanitary survey inspectors trained and certified.   |

## **Major Activities to Advance Strategies**

- Conduct reviews for construction, operation, and separation distance waivers.
- Review reports provided to consumers by PWS about sampling results.
- Process variances and exemptions to reduce the number of PWS significantly out of compliance.
- Respond to PWS noncompliance with enforcement actions and make referrals to EPA when appropriate.
- Help PWS owners prepare Emergency Response Plans and perform security audits on their water
- Conduct sanitary surveys of PWS and certify third party sanitary survey inspectors.
- Adopt and implement federal drinking water rules.
- Submit timely primacy applications to EPA for all federal rules adopted.
- Provide technical assistance about wellhead protection to communities.
- Review PWS sampling, monitoring, and reporting activities for all regulated drinking water contaminants.

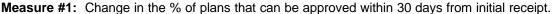
|          | Major Activities to Advance Strategies |  |
|----------|--|--|
| systems. |  |  |

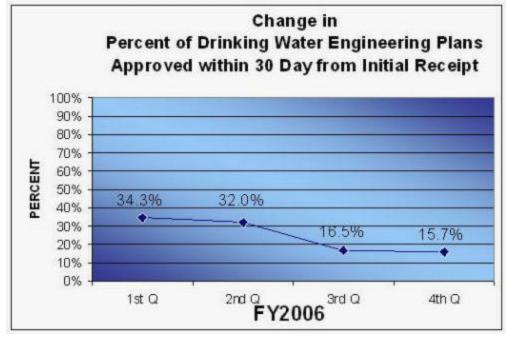
| FY2008 Resources Al                  | located to Achieve Result | :s |
|--------------------------------------|---------------------------|----|
| FY2008 Component Budget: \$5,653,500 | Personnel:<br>Full time   | 53 |
|                                      | Part time                 | 0  |
|                                      | Total                     | 53 |
|                                      |                           |    |

#### **Performance Measure Detail**

#### A: Result - Drinking water is safe.

**Target #1:**Increase the % of drinking water engineering plans that can be approved within 30 days from initial receipt.





Analysis of results and challenges: To provide for the protection of public health, Drinking Water regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified, engineering plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineering review process, the engineer will determine if specifications and materials used in the construction or modification of a PWS meet the criteria of the Drinking Water Regulations. These criteria address many items that, taken together, best protect public heath and provide safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineering plan submittals within 30 days of receipt.

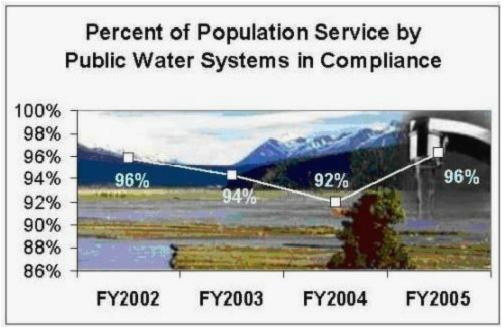
Most public water systems by design are complex, with many individual components, including the treatment plant and distribution system that must be reviewed and approved by DEC. Due to the complexity of the systems and the importance of protecting people from waterborne disease, the engineering plan review process

is also complex. Many engineering plan submittals do not contain required information, needed by department engineers in order to begin the review process. Submitting incomplete engineered plans increases the review process timeline. ADEC anticipates conducting an Advanced Sanitary Survey class and other outreach sessions on new and upcoming rule implementation, as well as implementation of new engineered plan submittal checklists to assist in reducing the time necessary for clarification and technical assistance.

This measure will fluctuate with unplanned vacancies and/or implementation of new complex federal rules requiring equally complex changes to the public drinking water systems. During the reporting period there was a decrease in the number of plans reviewed within 30 days of initial receipt because of: 1) An increase in the number of public water system plans received; 2) An increase in complexity of public water system plans received, which can be attributed to the new Long Term 1 Enhanced Surface Water Treatment and Stage 1 Disinfectants/Disinfection byproducts Rules; and, 3) Vacancies and recently hired new and inexperienced engineering staff.

**Target #2:**100% of the population served by public water systems (PWS) in compliance with health-based standards.

**Measure #2:** % of the population served by public water systems (PWS) in compliance with health-based standards.



Analysis of results and challenges: To address the threat of waterborne disease and provide for the protection of public health, the State of Alaska has adopted the Safe Drinking Water Act (SDWA) requirements and the Drinking Water Program is responsible for the implementation of the SDWA within the State. All federally regulated public water systems are required to be in compliance with the SDWA. Various health-based standards contained within the SDWA are designed to protect people from consuming unsafe drinking water. Health-based standards are EPA established limits for many chemical and radiological contaminants, called Maximum Contaminant Levels (MCL's), as well as, microbiological contaminants. The MCL is an enforceable standard that all public water systems must meet in order to serve drinking water to the public. There are also various Treatment Technique criteria that public water systems must meet. Treatment Techniques have to do with the way water is treated to make it potable and safe for human consumption. All of these criteria make up the health-based standards.

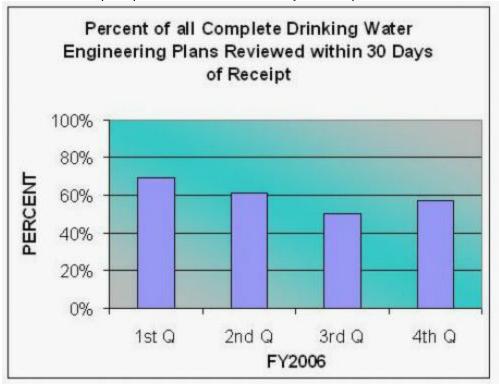
This information is compiled and distributed by EPA. The reporting frequency has been reduced to annual fiscal year basis. Data for the prior year is not available until October or November of each year. The last information reported from EPA was in the fourth quarter of FY2005, which was 96% of the population of Alaska was served by public water systems that meet all health based standards.

While a 96% compliance rate with health based standards is excellent, it does fall below our goal of having

100% of the population being served by public water systems in compliance with all of the health-based standards. The Drinking Water Program continues to meet this challenge in several different ways. We continue to offer compliance and technical assistance to all public water system operators and owners to help them to remain in compliance with all of the health-based standards that apply to their systems. The drinking water program also has various enforcement strategies in place to require that public water systems remain in compliance with the health-based standards. This two-pronged approach to compliance assistance and enforcement allows us to ensure that as many people as possible are being served with safe drinking water.

## A1: Strategy - Timely review of all complete drinking water engineering plans submitted.

**Target #1:**Review all complete submissions of drinking water engineering plans within a 30 day time frame. **Measure #1:** % of all complete plans reviewed within 30 days of receipt.



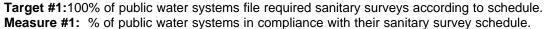
Analysis of results and challenges: Waterborne disease continues to be a threat to public health in many areas. To provide for the protection of public health, the Drinking Water Regulations (18 AAC 80) require that any time a public water system (PWS) is constructed or modified that engineering plans be submitted to the Drinking Water Program for review by department engineering staff. During the engineering review process, the engineer will determine if specifications and materials used in the construction or modification of a PWS meet criteria of the Drinking Water Regulations. These criteria address many items that, taken together, best protect public health and provide safe drinking water. In order to make sure that public water systems are being constructed and operated in a safe manner and are protective of public health, department engineers are required to review complete engineering plan submittals within 30 days of receipt.

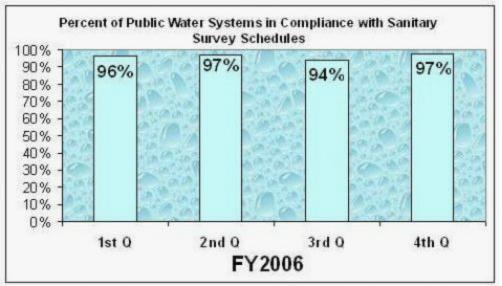
Due to the complexity of the systems and the importance of protecting people from waterborne disease, the engineering plan review process is also complex. Many engineering plan submittals do not contain required information, needed by department engineers in order to begin the review process. Submitting incomplete engineered plans increases the review process timeline. ADEC anticipates conducting an Advanced Sanitary Survey class and other outreach sessions on new and upcoming rule implementation, as well as implementation of new engineered plan submittal checklists to assist in reducing the time necessary for clarification and technical assistance.

This measure will fluctuate with unplanned vacancies and/or implementation of new complex federal rules requiring equally complex changes to the public drinking water systems. During the reporting period there was

a decrease in the number of plans reviewed within 30 days of initial receipt because of: 1) An increase in the number of public water system plans received; 2) An increase in complexity of public water system plans received, which can be attributed to the new Long Term 1 Enhanced Surface Water Treatment and Stage 1 Disinfectants/Disinfection byproducts Rules; and, 3) Vacancies and recently hired new and inexperienced engineering staff.

## A2: Strategy - Implement sanitary survey requirements for all federally regulated public water systems.





Analysis of results and challenges: As part of the 1986 Amendments to the Safe Drinking Water Act, the EPA promulgated the Total Coliform Rule (TCR) which was adopted by the State in 1993. The TCR is the primary health-based regulation used to require all public water systems to routinely monitor for bacteriological contamination in the drinking water they serve to the public. Since most waterborne disease outbreaks are caused by bacteria or other microorganisms, routinely testing for bacteriological contaminants is one of the best ways we have of making sure that drinking water is safe to drink. Another very important part of the TCR is the requirement that all federally regulated public water systems have a periodic sanitary survey completed for their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and the operations and maintenance procedures of a public water system. The sanitary survey process is used to evaluate the adequacy of a system and helps to determine if they are producing and distributing safe drinking water. Systems using groundwater as a source are required to have a sanitary survey every five years. Systems using surface water as a source are required to have a sanitary survey every three years.

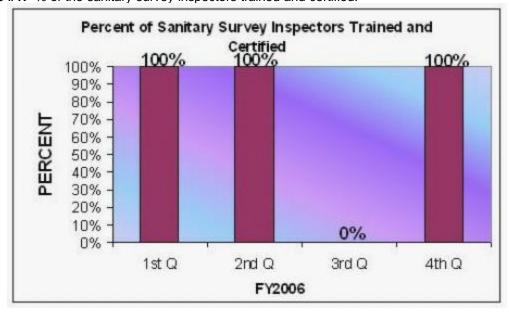
In the fourth quarter of FY2006 a total of 1,545 public water systems had a sanitary survey scheduled requirement. Of that total, 1,504 public water systems had their scheduled sanitary survey completed. This number reflects a 97% compliance rate with the sanitary survey requirement for FY2006.

While a 97% compliance rate with the sanitary survey scheduled requirement is good, it does fall below the target rate of 100% of the population being served by a public water system in compliance with health-based standards. Since the sanitary survey scheduled requirement is one of the most important health-based standards, conducting timely sanitary surveys is one of the priority goals of the Drinking Water Program. Some of the challenges we face in meeting this goal are: remote location and difficulty getting to some of the public water systems, cost to the system of conducting the sanitary survey, and the lack of sufficient and timely enforcement actions to establish/confirm the high priority of sanitary surveys. The Drinking Water Program continues to address these challenges by having the Program's Environmental Specialists and Environmental Engineers trained and certified, as well as ADEC-approved third party sanitary survey inspectors to conduct

sanitary surveys and by scheduling and conducting sanitary survey inspections for public water systems.

## A3: Strategy - Train and certify third party sanitary survey inspectors.

**Target #1:**100% of the sanitary survey inspectors are trained and certified. **Measure #1:** % of the sanitary survey inspectors trained and certified.



Analysis of results and challenges: All federally regulated public water systems are required to have a periodic sanitary survey completed for their entire water system. A sanitary survey is an onsite review of the water source, treatment facilities and equipment, and operation and maintenance procedures of a public water system. The sanitary survey is used to evaluate the adequacy of the system and helps to determine if they can produce and distribute safe drinking water. Sanitary surveys are required every five years for public water systems using a groundwater source and every three years for public water systems using a surface water source. Most public water systems are very complex, with many individual components that must be inspected during the sanitary survey. The complexity of inspecting the public water system and the protection of public health requires that a person conducting a sanitary survey be knowledgeable in all aspects of drinking water treatment and distribution. This requires extensive and specialized training. There are approximately 1,600 federally regulated public water systems in Alaska that must meet the sanitary survey requirement. Not all sanitary surveys can be conducted by department staff, so the Drinking Water Program has contracted with the University of Alaska Southeast, the Alaska Training/Technical Assistance Center (ATTAC) to provide training sessions for both department staff and other third party individuals who have prior experience with public water system treatment and distribution process. ATTAC currently offers at least three training sessions per year, which includes two Basic Sanitary Survey classes and one Advanced Sanitary Survey class. The Drinking Water Program also plans to offer one Advanced Sanitary Survey class annually.

The data for the 1st, 2nd, and 4th quarters of FY2006 shows that we have met our goal of 100% certification of food handlers and sanitary survey inspectors, however the 3rd quarter shows a 0%. This was due to having zero food handlers and sanitary inspectors being certified.

## **Component: Solid Waste Management**

## **Contribution to Department's Mission**

Environmental protection by requiring appropriate management of Alaska's landfills and safe pesticide use.

#### **Core Services**

- Review and approve permit applications including plans for design, operations, monitoring, management, construction, and closure; issue permits for solid waste treatment and disposal facilities; and review monitoring results
- Inspect landfills to verify their compliance with permit requirements and state solid waste regulations.
- Monitor closed landfill sites.
- Train and certify pesticide applicators.
- Register and monitor the sale, use, and storage of pesticides.
- Conduct inspections of pesticide distributors and applications of restricted use pesticides to ensure compliance with the Worker Protection Standards.
- Conduct inspections to ensure commercial pesticide application is done in accordance with the Endangered Species Act and Clean Water Act.
- Review water and sampling results for pesticides to ensure protection of ground water and surface water and report findings to the Environmental Protection Agency.
- Issue and monitor pesticide permits.

| End Results  | Strategies to Achieve Results   |  |
|--|---|--|
| A: Landfills and pesticides are not sources of pollution.  Target #1: 100% of Class I and II municipal landfills, regulated industry landfills, and storage/transfer areas are properly located, authorized/permitted, and operating landfills.  Measure #1: % of Class I and II municipal landfills, industrial landfills and storage/transfer areas that are properly located, authorized/permitted and operating landfills. | A1: Establish protective standards for Solid Waste.  Target #1: Solid Waste regulations will be revised, adopted and implemented by the end of FY2008.  Measure #1: % of solid waste regulations and standard complete.  Target #2: Pesticide regulations are revised, adopted ar implemented by the end of FY2007.  Measure #2: % of pesticide regulations and standards complete.   |  |
|  | A2: Issue Solid Waste permits timely.  Target #1: 90% of permit/authorizations are processed within 120 days of receiving required documentation.  Measure #1: % of permit/authorizations processed within 120 days of receiving required documentation.  A3: Strengthen Solid Waste Program Enforcement.  Target #1: Implement enforcement program for Solid Waste by FY2008.  Measure #1: % of enforcement program implemented for Solid Waste. |  |

## **Major Activities to Advance Strategies**

- Implement the landfill location risk-based model.
- Evaluate, revise and start implementation of a riskbased statewide inspection and compliance plan.
- Implement a self-audit program for landfill owners based on different risk levels.
- Inspect landfills based on level of risk.

- Inspect for non-compliance of pesticide regulations and the Worker Protection Standard.
- · Process pesticide application permits.
- Provide compliance assistance to and inspect public places, including schools, relating to pesticide use.
- Register pesticides for sale, distribution and use in the state.

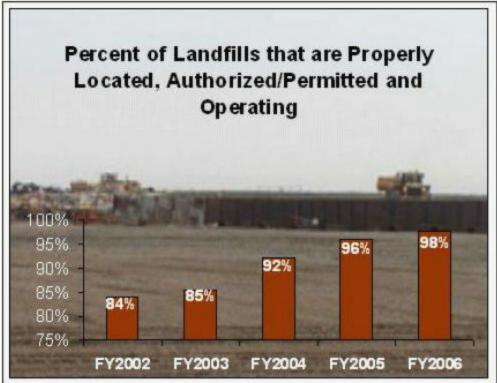
| FY2008 Resources Allocated to Achieve Results |                      |    |
|---|----------------------|----|
| FY2008 Component Budget: \$2,261,800          | Personnel: Full time | 22 |
|   | Part time            | 0  |
|   | Total                | 22 |

#### **Performance Measure Detail**

## A: Result - Landfills and pesticides are not sources of pollution.

**Target #1:**100% of Class I and II municipal landfills, regulated industry landfills, and storage/transfer areas are properly located, authorized/permitted, and operating landfills.

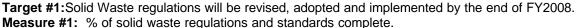
**Measure #1:** % of Class I and II municipal landfills, industrial landfills and storage/transfer areas that are properly located, authorized/permitted and operating landfills.

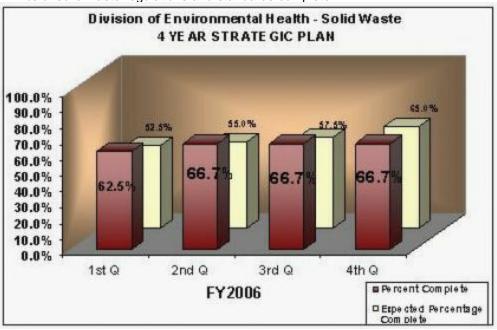


Analysis of results and challenges: All municipal landfills that receive more than 5 tons of waste per day and

all disposal sites associated with industrial activities (oil & gas, construction, mining, and agriculture) are required to have a permit. The Solid Waste Program issues these permits and tracks the overall compliance rate by comparing the number of active permits to the number of sites that require a permit. Although the goal is that 100% of these facilities are permitted, two factors in how permits are tracked affect the Solid Waste Program's ability to reach that goal. One factor is that permits are renewed every five years. When a renewal application is received, the permit status for the facility is changed in the Solid Waste Program database from "current" to "in process". Thus, any facilities that are in the process of renewing their permits are not counted as having a permit. Another factor is that proposed facilities are entered into the database and the tracking system before the initial permit is issued and before the facility begins operations. Thus, proposed facilities are included in the count of facilities that need a permit but are not counted among the facilities that have a permit. The significance of these factors is dependent on how many permits are being renewed or how many new facilities are being permitted at the time the measure is reported.

#### A1: Strategy - Establish protective standards for Solid Waste.

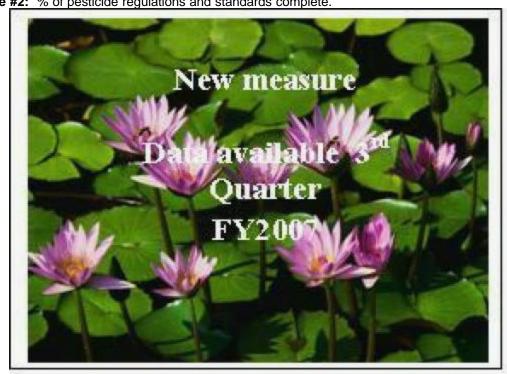




Analysis of results and challenges: Solid Waste Program effectively manages waste disposal in communities that produce more than 5 tons of municipal solid waste per day by issuing individual permits to the landfills serving those communities. Currently, small communities producing less than 5 tons of municipal solid waste per day are also required to have a permit but only 25% of the Class III communities have permitted landfills. Since the permit process is difficult for small communities with limited resources, a simplified authorization process is needed to improve the permitting rate among small communities. As such, the department is in the process of changing the structure of the solid waste program.

As a first step in this process, legislation was requested and passed in 2004 that gave DEC the ability to authorize disposal activities by regulation (i.e. prior authorization) rather than solely by permit. To utilize this new authority, it is necessary to revise the solid waste regulations. Efforts to revise the regulations have proceeded steadily and a draft package of revised regulations was completed by the end of FY2005. Much of FY2006 was spent on internal review of the draft regulations and revision of the regulations in response to review comments. Internal review of the revised draft regulations is currently underway. No further progress can be tracked on this measure until a draft package of regulations is released for public comment.

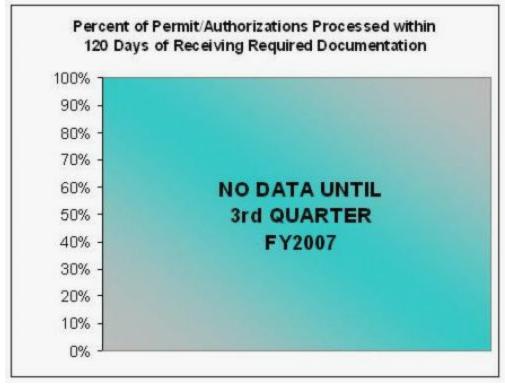
**Target #2:**Pesticide regulations are revised, adopted and implemented by the end of FY2007. **Measure #2:** % of pesticide regulations and standards complete.



**Analysis of results and challenges:** This is a new Target and Measure that will be implemented by the end of FY2007.

## A2: Strategy - Issue Solid Waste permits timely.

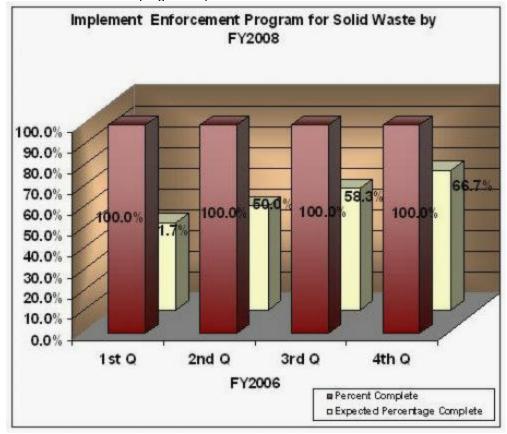
**Target #1:**90% of permit/authorizations are processed within 120 days of receiving required documentation. **Measure #1:** % of permit/authorizations processed within 120 days of receiving required documentation.



**Analysis of results and challenges:** Tracking the time it takes to process a Class I, Class II, and industrial permit is a new measure for the Solid Waste Program. A new database is under development and is scheduled to be in place by the third quarter of FY2007. Once the new database is functional, the data for the first two quarters of FY2007 will be entered and reporting of this measure is expected to begin at the end of the third quarter of FY2007.

## A3: Strategy - Strengthen Solid Waste Program Enforcement.

**Target #1:**Implement enforcement program for Solid Waste by FY2008. **Measure #1:** % of enforcement program implemented for Solid Waste.



Analysis of results and challenges: The Solid Waste Program undertook major restructuring of the permitting process and development of "prior authorization" procedure for municipal and industrial landfills. With these revisions and new structures, the Solid Waste Program evaluates non-compliance with landfill permitting and prior authorization to determine the appropriate level and type of enforcement for violations. A policy has been established for how formal enforcement will proceed when such action is necessary. With the policy in place, the measure is reported as 100% complete and will be removed at the end of FY2006.

## **Air Quality Results Delivery Unit**

## **Contribution to Department's Mission**

Protect air quality.

### **Core Services**

- Issue air quality permits to facilities that release potentially harmful pollutants.
- Provide compliance assistance and enforcement (inspections and operating report reviews).
- Community assistance to protect air quality.
- Air quality assessments.

| End Results  | Strategies to Achieve Results   |
|--|---|
| A: Air quality is protected.  Target #1: No days violating air quality health based standards.  Measure #1: # of days violating the air quality health based standards (from human sources of pollution).  Target #2: No days violating air quality health based standards.  Measure #2: # of days violating the air quality health based standards (from natural sources of pollution). | A1: Establish standards for air quality that are protective of public health and the environment.  Target #1: Complete preliminary assessment of health impacts of diesel fuel emissions in rural communities by the end of FY2007.  Measure #1: % of preliminary assessment of health impacts of diesel fuel emissions in rural communities completed by the end of FY2007.  Target #2: Complete regional haze SIP by the end of FY2008.  Measure #2: % of SIP for regional haze complete by the end FY2008.  A2: Improve and streamline air permit practices.  Target #1: All categories of permits will have standardized applications and internal review procedures by the end of FY2008.  Measure #1: % of permits categories that have standardized application and internal review procedures.  Target #2: 95% of construction and minor permits issued within 130 days of receiving a completed application.  Measure #2: % of construction and minor permits issued within 130 days of receiving a completed application.  A3: Minimize pollution from gasoline vehicles.  Target #1: For communities that have Inspection and Maintenance (I/M) programs, no more than 5% of vehicles are found to be out of compliance with tailpipe requirements.  Measure #1: % of vehicles found to be out of compliance.  A4: Minimize pollution from stationary sources. |
|  | Target #1: 100% of facilities requiring air permits are in  |

compliance.

Measure #1: % of facilities found in compliance, or on an enforceable compliance schedule, or subject to formal enforcement action by the department.

## **Major Activities to Advance Strategies**

- Establish and operate air monitors.
- Develop strategies to address particulate matter pollution problems.
- Implement a Quality Management System for permit and compliance services.
- Conduct compliance inspections and in-office compliance reviews.
- Develop foundations of an Alaska carbon strategy through research and collaboration.
- Improve on-line permitting services and compliance reporting for external users.

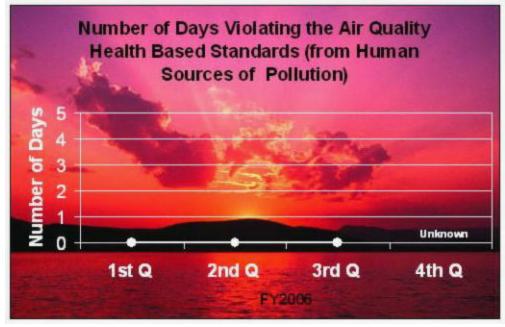
| FY2008 Resources Allocated to Achieve Results    |                      |    |
|--|----------------------|----|
| FY2008 Results Delivery Unit Budget: \$9,681,100 | Personnel: Full time | 62 |
| 1 12000 Results Benvery Offic Budget. 40,001,100 | Part time            | 0  |
|  | Total                | 62 |

#### **Performance Measure Detail**

## A: Result - Air quality is protected.

Target #1:No days violating air quality health based standards.

Measure #1: # of days violating the air quality health based standards (from human sources of pollution).

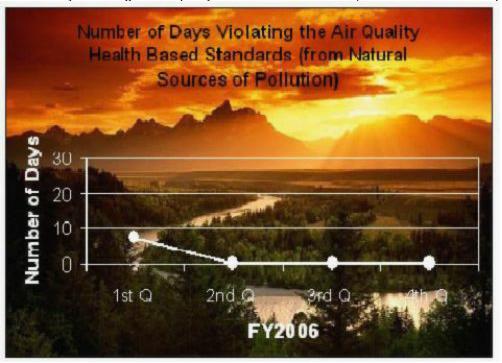


**Analysis of results and challenges:** DEC has been collecting ambient air data at selected locations around the state for over 25 years. Air monitoring is performed to ensure compliance with the National Ambient Air Quality Standards designed to protect public health. The majority of the State's monitoring takes place in larger

communities or where complaints have been received. There were no violations of the carbon monoxide (CO) standard during the winter 2005-2006 or fine particulate standard (PM 2.5) during the first three quarters of FY06 from human caused activity. The fourth quarter data for FY06 will be available December 2006.

In addition to the State monitoring network, the Air Quality division is engaged in an air monitoring project to measure airborne levels of dust (PM 10) pollution as part of a Department of Transportation (DOT) research project evaluating the effectiveness of paving roads in Kotzebue. High airborne dust levels from vehicle traffic on unpaved roads violate the health based standard in Kotzebue and other rural communities. The Department will be working with the affected communities and DOT to develop an effective control strategy for dust in the Region.

**Target #2:**No days violating air quality health based standards. **Measure #2:** # of days violating the air quality health based standards (from natural sources of pollution).



**Analysis of results and challenges:** Alaska has many sources of natural pollution; wind blown dust, dust from volcanic eruptions and smoke from forest fires. Although natural in source, these forms of pollution can severely impact public health and impact the public's enjoyment of Alaska.

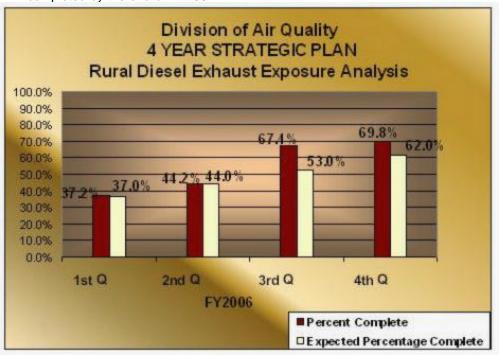
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# A1: Strategy - Establish standards for air quality that are protective of public health and the environment.

**Target #1:**Complete preliminary assessment of health impacts of diesel fuel emissions in rural communities by the end of FY2007.

**Measure #1:** % of preliminary assessment of health impacts of diesel fuel emissions in rural communities completed by the end of FY2007.



Analysis of results and challenges: The diesel health assessment project is designed to quantify health risks due to diesel exhaust pollutants. New federal rules will reduce diesel exhaust pollution from mobile equipment, like trucks and buses. Diesel fuel use in rural Alaska is dominated by power generation and home heating equipment – not mobile sources. Federal rules do not address these rural Alaska sources of diesel exhaust and did not consider the unique source and population exposure profile of rural Alaska. Credible scientific information is needed to determine whether diesel related health impacts are occurring in rural areas and whether the costs associated with converting communities to cleaner diesel fuel are justified.

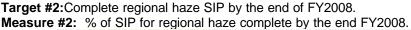
This is a multi-year project. During fiscal year 2004, the department developed study proposals for both the health and air monitoring components of the project. In order to develop a scientifically sound approach for the study, a group was formed to review the options. The group was comprised of DEC staff, the Alaska Native Health Board Epidemiological Center, University of Alaska Institute for Circumpolar Health, and the Environmental Protection Agency. The group evaluated a number of study options.

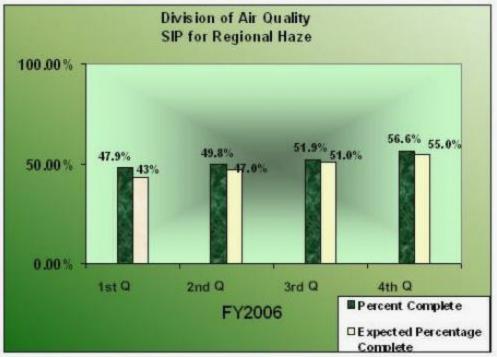
During fiscal year 2005, department staff worked with the University of Alaska, Institute of Circumpolar Health and the Alaska Native Health Board to find a willing community in which to conduct a pilot study on the impacts of diesel in rural areas. Staff analyzed meteorological information to determine communities with greater potential for impacts and contacted communities to determine interest. Visits were made to present the project to prospective communities and to determine logistics. Staff collected tribal and city assembly resolutions supporting the study from each candidate community. Ambient monitoring equipment was procured. A contract was established with the University of Alaska for the health assessment work. A community was selected for the pilot project. During the coming year, the pilot study will be initiated.

During fiscal year 2006, agreements were made between DEC and local community governments for placement and operation of air monitors for the pilot study. DEC identified monitoring sites, installed monitors, trained locals to run the monitors, and oversaw monitoring during the late winter and early spring. The University of Alaska, Institute of Circumpolar Health obtained approvals to perform pulmonary health measurements, recruited

and trained health assessors, recruited subjects, installed indoor air monitors, and performed health assessments.

To plan and conduct the project in the future the Department will analyze, and evaluate air monitoring and health data. The project is broken into major steps such as (but not limited to) project development, peer review of study design, ambient air and health data collection, analysis of data, and report drafting. The Department is measuring progress towards completing the pilot study by tracking the major project steps.





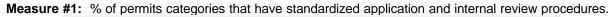
**Analysis of results and challenges:** A Regional Haze State Implementation Plan (SIP) is required by the Clean Air Act to address visibility concerns in Denali National Park and three wildlife refuges in Alaska. The plan is due to EPA by December 17, 2007.

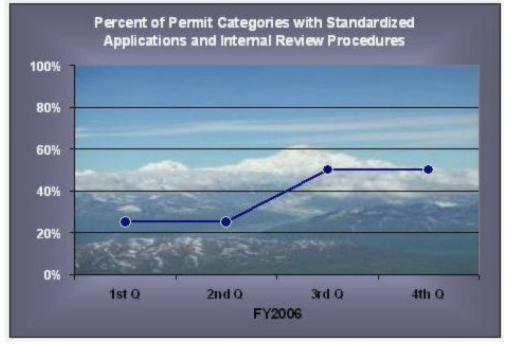
This is a multi-year project. During fiscal years 2004, 2005, and 2006, the department focused on the development of the technical information needed for the plan with help from external organizations. Federal agencies operate the primary visibility monitoring network. Alaska is a member of the Western Regional Air Partnership (WRAP), a regional planning organization that consists of states, tribes, and federal agencies. WRAP assists Alaska with developing technical information and policy tools needed for the SIP including: developing an inventory of emissions, visibility forecast models for future years and analysis of air monitoring samples. In addition to developing technical data, the department worked with land managing agencies to develop a Smoke Management Plan that will become a part of the regional haze SIP. The new Smoke Management Plan should allow for a balanced approach to managing controlled burns for resource development while also protecting visibility in Denali Park and other Alaska Class I visibility protection areas.

During the coming year, the department and these other agencies will complete work on the technical basis for the SIP and, if controls are warranted, evaluate control options. To do this, the Department will collect, analyze, and evaluate visibility impacts from air pollution in these areas, and identify controls to reduce those visibility impacts. The project is broken into major steps such as (but not limited to) the collection of technical information, analysis of control strategies, drafting of the SIP document, regulation development and the public adoption process. The Department is measuring progress toward completing the regional haze SIP by tracking major project steps.

## A2: Strategy - Improve and streamline air permit practices.

**Target #1:**All categories of permits will have standardized applications and internal review procedures by the end of FY2008.





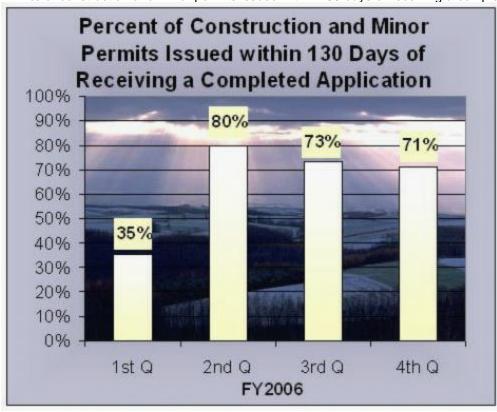
**Analysis of results and challenges:** Standardized applications and internal review procedures allow the Department to act consistently and efficiently on permit applications. Our permitting program has four major categories of permits: Construction permits, general permits, facility specific operating permits, and minor source permits. General permits are either general operating permits or general minor permits.

Beginning January 29, 2005, the effective date of new permit program regulations, construction and operating permit programs have been rewritten. Existing guidance documents, review procedures and application forms for operating and construction permits need to be updated.

Standard applications have been developed or updated for minor source permits and general permits. All applications are available on the Air Permits webpage. New regulations for Minor General Permit One were effective December 15, 2006. All general permits were updated to new federal regulations on March 31, 2006. Minor permits were updated on January 4, 2006 and July 24, 2006. Therefore, we have estimated that 50% of the source categories have current standardized applications and internal review procedures.

Standard review procedures for all permit categories need to be updated. The current four major categories do not accurately reflect the intricacy of the permits or review process. A standardize review process requires a determination of specific requirements for the array of permit applications. The Air Program is developing a Quality Management system based on ISO 9000 standards beginning FY2007. We expect complete development of standardized applications and internal review procedures by FY2008.

The Emission fee study and new regulation adoption has slowed permit procedure development. In addition, the new fee regulations required by statute required significant changes in staff time accounting, billing, and permit processing procedures, further delaying standard permit procedure development.



**Target #2:**95% of construction and minor permits issued within 130 days of receiving a completed application. **Measure #2:** % of construction and minor permits issued within 130 days of receiving a completed application.

**Analysis of results and challenges:** Results for this measure are calculated by dividing the number of permits issued within the quarter in 130 days or less by the total number of permits issued during the quarter. The clock starts when a complete application is received and flat fees have been paid and, if additional information is needed, stops until the information has been provided.

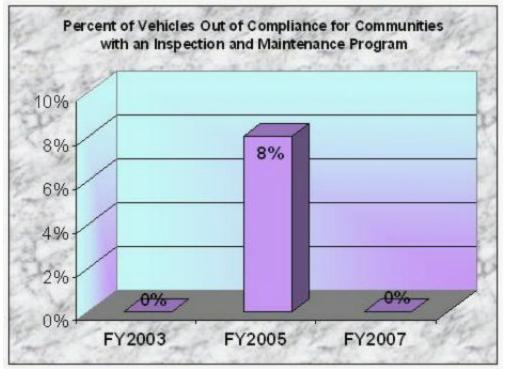
The percentage of permits issued within 130 days was down during the last quarter of FY2006 partially because of staff turnover. Two positions were vacant during the last two quarters. New staff were hired but the loss of experience and the time required hiring and training new staff reduced efficiency. Another vacancy opened in the fourth quarter of FY06. The program is currently recruiting for that position.

Included in this year's projection for streamlining the program are: establishment of a new quality management system; implementation of on-line electronic permitting; and hiring, training and retaining staff. Program activities are on track to have improvements completed and we expect to reduce construction permitting times by the end of FY2006.

## A3: Strategy - Minimize pollution from gasoline vehicles.

**Target #1:**For communities that have Inspection and Maintenance (I/M) programs, no more than 5% of vehicles are found to be out of compliance with tailpipe requirements.

Measure #1: % of vehicles found to be out of compliance.



**Analysis of results and challenges:** Anchorage and Fairbanks exceeded health based standards for carbon monoxide in 1972. This required the start of a vehicle inspection program in 1985. Vehicles registered in both communities must pass an emission inspection to be registered or have their registration renewed by DMV. In addition, vehicle owners who live outside of Anchorage or Fairbanks but commute to work and school inside these locales are required to have an inspection.

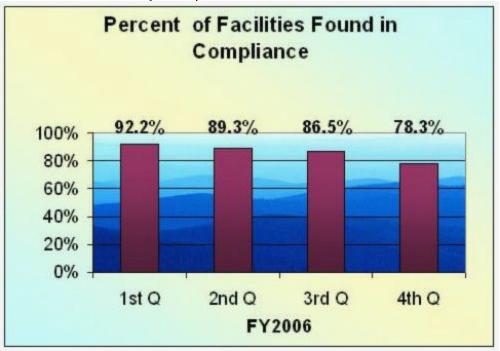
To determine compliance with the vehicle inspection program, the department performs a survey of in-use vehicles every other year in Anchorage and Fairbanks, recording the license plate and windshield sticker information. In order to be statistically valid, approximately 10,000 non-duplicative vehicle license plate recordings are needed in Anchorage and approximately 6,000 in Fairbanks. In-use vehicle records from the survey are electronically compared to the I/M inspection database, which can identify whether the vehicle has a current inspection.

The time and location for each survey is selected very carefully. Surveys are not conducted during evenings or weekends. Emphasis is placed on areas used by the local resident, businesses, and school parking lots. Information is collected in winter when carbon monoxide problems exist. Those vehicles that do not need an inspection are excluded. The time necessary to collect the number of vehicle observations is very labor intensive. Due to these limitations of time and expense, data is collected once every two years. Data collection is next scheduled for January to March of 2007.

## A4: Strategy - Minimize pollution from stationary sources.

**Target #1:**100% of facilities requiring air permits are in compliance.

**Measure #1:** % of facilities found in compliance, or on an enforceable compliance schedule, or subject to formal enforcement action by the department.



Analysis of results and challenges: These figures represent the number of permitted stationary sources that have unaddressed compliance issues and the total number of permitted sources. Air program inspectors record data regarding source compliance issues found through public complaints, permittee self-reporting, and during the inspectors' scheduled compliance evaluations. The program evaluates compliance status of each major permitted source no less than once every two years and the compliance status of each synthetic minor permitted source no less than once every five years.

The percentage of permitted sources found in compliance is lower than that during FY2005. Compliance rates dropped from 92 percent to 78 percent during the first three quarters of FY2006. We attribute this downward trend to recordkeeping and data tracking improvements. Previously staff did not consistently log these events into the department's database. The program improved event logging through its compliance assurance standardization initiative, and expects compliance trends to remain in the mid 80 percent range during FY2007.

# **Component: Air Quality**

## **Contribution to Department's Mission**

Identify, prevent, abate, and control air pollution to protect public health and the environment in a cost-effective, accountable manner.

### **Core Services**

- Issue air quality permits to facilities that release potentially harmful pollutants.
- Provide compliance assistance and enforcement (inspections and operating report reviews).
- Community assistance to protect air quality.
- Air quality assessments.

| End Results  | Strategies to Achieve Results  |
|--|--|
| A: Air quality is protected.  Target #1: No days violating air quality health based standards.  Measure #1: # of days violating the air quality health based standards (from human sources of pollution).  Target #2: No days violating air quality health based standards.  Measure #2: # of days violating the air quality health based standards (from natural sources of pollution). | A1: Establish standards for air quality that are protective of public health and the environment.  Target #1: Complete preliminary assessment of health impacts of diesel fuel emissions in rural communities by the end of FY2007.  Measure #1: % of preliminary assessment of health impacts of diesel fuel emissions in rural communities completed by the end of FY2007.  Target #2: Complete regional haze SIP by the end of FY2008.  Measure #2: % of SIP for regional haze complete by the end of FY2008.  A2: Improve and streamline air permit practices.  Target #1: All categories of permits will have standardized applications and internal review procedures by the end of FY2008.  Measure #1: % of permits categories that have standardized application and internal review procedures.  Target #2: 95% of construction and minor permits issued within 130 days of receiving a completed application.  Measure #2: % of construction and minor permits issued within 130 days of receiving a completed application.  A3: Minimize pollution from gasoline vehicles.  Target #1: For communities that have Inspection and Maintenance (I/M) programs, no more than 5% of vehicles are found to be out of compliance with tailpipe requirements.  Measure #1: % of vehicles found to be out of compliance.  A4: Minimize pollution from stationary sources.  Target #1: 100% of facilities requiring air permits are in |

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## **Major Activities to Advance Strategies**

- Establish and operate air monitors.
- Develop strategies to address particulate matter pollution problems.
- Implement Quality Management System for permit and compliance services.
- Conduct compliance inspections and in-office compliance reviews.
- Develop foundations of an Alaska carbon strategy through research and collaboration.
- Improve on-line permitting services and compliance reporting for external users.

| FY2008 Resources Allocated to Achieve Results |                      |    |
|---|----------------------|----|
| FY2008 Component Budget: \$9,413,700          | Personnel: Full time | 60 |
| •       | Part time            | 0  |
|   | Total                | 60 |

#### **Performance Measure Detail**

## A: Result - Air quality is protected.

Target #1:No days violating air quality health based standards.

Measure #1: # of days violating the air quality health based standards (from human sources of pollution).



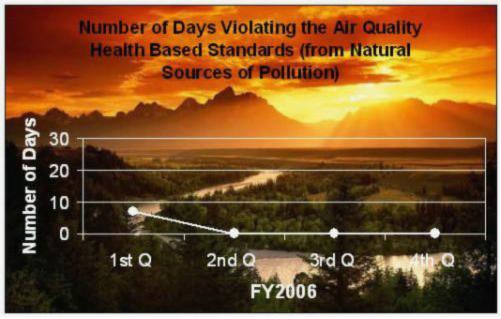
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Target #2:No days violating air quality health based standards.

Measure #2: # of days violating the air quality health based standards (from natural sources of pollution).



**Analysis of results and challenges:** Alaska has many sources of natural pollution; wind blown dust, dust from volcanic eruptions and smoke from forest fires. Although natural in source, these forms of pollution can severely impact public health and impact the public's enjoyment of Alaska.

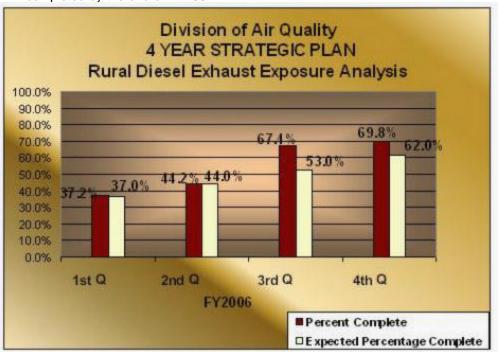
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Analysis of results and challenges: The diesel health assessment project is designed to quantify health risks due to diesel exhaust pollutants. New federal rules will reduce diesel exhaust pollution from mobile equipment, like trucks and buses. Diesel fuel use in rural Alaska is dominated by power generation and home heating equipment – not mobile sources. Federal rules do not address these rural Alaska sources of diesel exhaust and did not consider the unique source and population exposure profile of rural Alaska. Credible scientific information is needed to determine whether diesel related health impacts are occurring in rural areas and whether the costs associated with converting communities to cleaner diesel fuel are justified.

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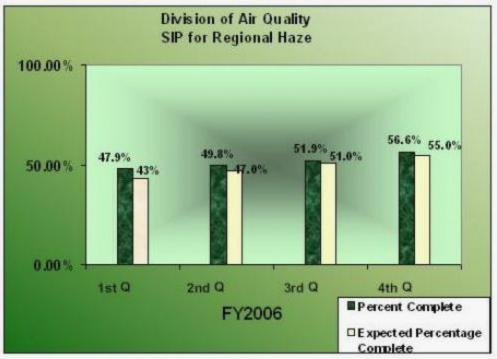
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**Target #2:**Complete regional haze SIP by the end of FY2008. **Measure #2:** % of SIP for regional haze complete by the end of FY2008.



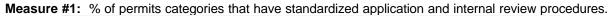
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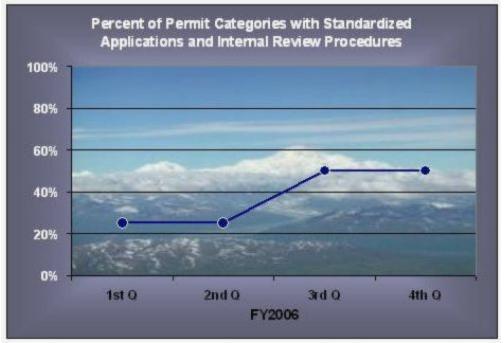
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## A2: Strategy - Improve and streamline air permit practices.

**Target #1:**All categories of permits will have standardized applications and internal review procedures by the end of FY2008.





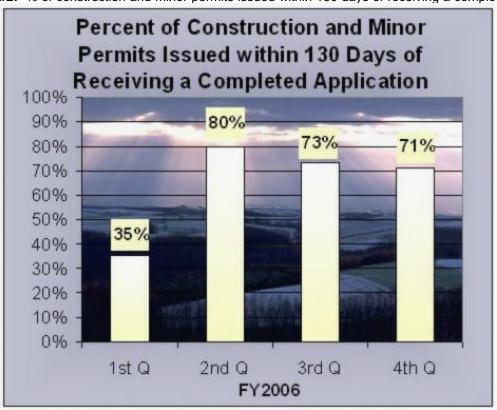
**Analysis of results and challenges:** Standardized applications and internal review procedures allow the Department to act consistently and efficiently on permit applications. Our permitting program has four major categories of permits: Construction permits, general permits, facility specific operating permits, and minor source permits. General permits are either general operating permits or general minor permits.

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**Target #2:**95% of construction and minor permits issued within 130 days of receiving a completed application. **Measure #2:** % of construction and minor permits issued within 130 days of receiving a completed application.

**Analysis of results and challenges:** : Results for this measure are calculated by dividing the number of permits issued within the quarter in 130 days or less by the total number of permits issued during the quarter. The clock starts when a complete application is received and flat fees have been paid and, if additional information is needed, stops until the information has been provided.

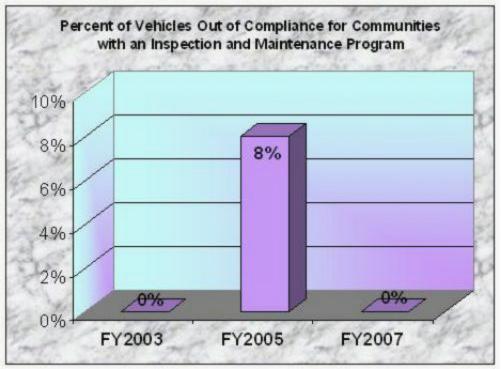
The percentage of permits issued within 130 days was down during the last quarter of FY2006 partially because of staff turnover. Two positions were vacant during the last two quarters. New staff were hired but the loss of experience and the time required hiring and training new staff reduced efficiency. Another vacancy opened in the fourth quarter of FY06. The program is currently recruiting for that position.

Included in this year's projection for streamlining the program are: establishment of a new quality management system; implementation of on-line electronic permitting; and hiring, training and retaining staff. Program activities are on track to have improvements completed and we expect to reduce construction permitting times by the end of FY2006.

## A3: Strategy - Minimize pollution from gasoline vehicles.

**Target #1:**For communities that have Inspection and Maintenance (I/M) programs, no more than 5% of vehicles are found to be out of compliance with tailpipe requirements.

Measure #1: % of vehicles found to be out of compliance.



**Analysis of results and challenges:** Anchorage and Fairbanks exceeded health based standards for carbon monoxide in 1972. This required the start of a vehicle inspection program in 1985. Vehicles registered in both communities must pass an emission inspection to be registered or have their registration renewed by DMV. In addition, vehicle owners who live outside of Anchorage or Fairbanks but commute to work and school inside these locales are required to have an inspection.

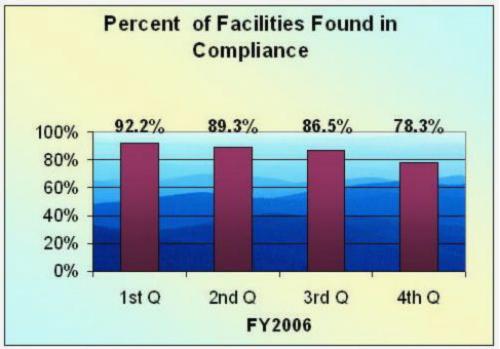
To determine compliance with the vehicle inspection program, the department performs a survey of in-use vehicles every other year in Anchorage and Fairbanks, recording the license plate and windshield sticker information. In order to be statistically valid, approximately 10,000 non-duplicative vehicle license plate recordings are needed in Anchorage and approximately 6,000 in Fairbanks. In-use vehicle records from the survey are electronically compared to the I/M inspection database, which can identify whether the vehicle has a current inspection.

The time and location for each survey is selected very carefully. Surveys are not conducted during evenings or weekends. Emphasis is placed on areas used by the local resident, businesses, and school parking lots. Information is collected in winter when carbon monoxide problems exist. Those vehicles that do not need an inspection are excluded. The time necessary to collect the number of vehicle observations is very labor intensive. Due to these limitations of time and expense, data is collected once every two years. Data collection is next scheduled for January to March of 2007.

## A4: Strategy - Minimize pollution from stationary sources.

**Target #1:**100% of facilities requiring air permits are in compliance.

**Measure #1:** % of facilities found in compliance, or on an enforceable compliance schedule, or subject to formal enforcement action by the department.



Analysis of results and challenges: These figures represent the number of permitted stationary sources that have unaddressed compliance issues and the total number of permitted sources. Air program inspectors record data regarding source compliance issues found through public complaints, permittee self-reporting, and during the inspectors' scheduled compliance evaluations. The program evaluates compliance status of each major permitted source no less than once every two years and the compliance status of each synthetic minor permitted source no less than once every five years.

The percentage of permitted sources found in compliance is lower than that during FY2005. Compliance rates dropped from 92 percent to 78 percent during the first three quarters of FY2006. We attribute this downward trend to recordkeeping and data tracking improvements. Previously staff did not consistently log these events into the department's database. The program improved event logging through its compliance assurance standardization initiative, and expects compliance trends to remain in the mid 80 percent range during FY2007.

# Spill Prevention and Response Results Delivery Unit

## **Contribution to Department's Mission**

Reduce unlawful oil and hazardous substance contamination in the environment.

#### **Core Services**

- Manage Division resources to protect public health and the environment through the safe handling and cleanup of oil and hazardous substances.
- Ensure that producers, transporters and distributors of crude oil and refined oil products prevent oil spills, and are fully prepared materially and financially to clean up spills.
- Prevent and mitigate the effects of oil and hazardous substance releases and ensure their cleanup through government planning and rapid response.
- Oversee and conduct cleanups at contaminated sites in Alaska and prevent releases from underground storage tanks and unregulated aboveground storage tanks.
- Manage the Oil and Hazardous Substance Release Prevention and Response Fund as a viable, long-term funding source for the state's core spill prevention and response initiatives.

| End Results   | Strategies to Achieve Results  |  |
|---|--|--|
| A: Land and water is not contaminated by spills of oil and hazardous substances.  | A1: Establish standards for protection from spills of oil and hazardous substances.  |  |
| Target #1: 10% increase from the previous year in the number of historical contaminated sites remediated.  Measure #1: % increase from the previous year in the | Target #1: Review and update all regulations by FY2009.  Measure #1: % of regulations reviewed and updated.  |  |
| number of historical contaminated sites remediated.   | A2: Contain and cleanup incidents of contamination to the environment from oil and hazardous substance   |  |
| Target #2: 98% of new spills are cleaned up or are in monitoring status.  | spills.  |  |
| Measure #2: % of new spills are cleaned up or are in monitoring status.   | Target #1: 100% response to reports of new contamination from oil and hazardous substance spills.  Measure #1: % of reports of new contamination responded to. |  |
|   | A3: Prevent spills of oil and hazardous substances.  |  |
|   | Target #1: Reduce number of new spills of oil and hazardous substances from regulated industry.  Measure #1: % change in number of new spills of oil and       |  |
|   | hazardous substances from regulated industry.  |  |

# **Major Activities to Advance Strategies**

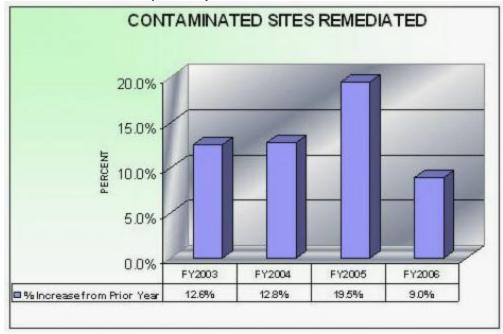
- Ensure emergency response and removal of oil and hazardous substance releases.
- Ensure the remediation of contaminated sites.
- Review regulated facility and vessel applications for compliance with oil discharge prevention and contingency plan requirements.
- Review oil discharge prevention and contingency plan requirements and update regulations.

| FY2008 Resources Allocated to Achieve Results     |                      |     |  |
|---|----------------------|-----|--|
| FY2008 Results Delivery Unit Budget: \$19,029,200 | Personnel: Full time | 156 |  |
|   | Part time            | 1   |  |
|   | Total                | 157 |  |
|   |                      |     |  |

#### **Performance Measure Detail**

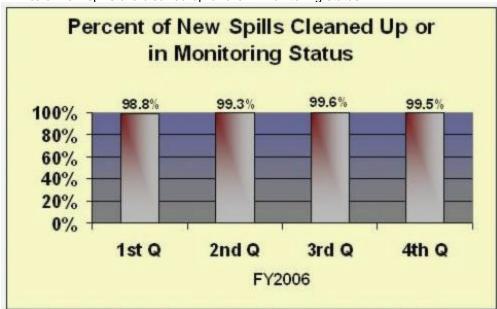
### A: Result - Land and water is not contaminated by spills of oil and hazardous substances.

**Target #1:**10% increase from the previous year in the number of historical contaminated sites remediated. **Measure #1:** % increase from the previous year in the number of historical contaminated sites remediated.



Analysis of results and challenges: Alaska has many sites that have been contaminated with oil or hazardous substances. Most of the contamination is historic, much of it occurring before the risks to the environment and human health were known, and additional historic contaminated sites are discovered almost daily. Severely contaminated sites may also have adverse economic and social impacts in terms of cleanup costs, or limitations on land use or land sales or transfers.

2006 performance data shows that our 10% increase goal was not met. In 2005, the goal was exceeded by a significant amount due to the completion of cleanup at the former Adak Naval Air Station, which was comprised of 170 individual sites. That huge increase in closures was a one time impact. But in additional to the anomaly in closures in 2005, the Contaminated Sites program has also seen a change in our cleanup strategy to focus short term resources at sites with a higher level risk to human health and the environment. When performing cleanups, we now focus on removing risk rather than reaching closure. Once risk is reduced at a site to a point where human health is not impacted, resources are then directed toward other sites where risk is still a factor – even though the first site has not been closed. Due to this change in our strategy, Contaminated Sites is implementing a new measurement tool to allow tracking of risk reduction, in addition to closures. This new tool will be available to track data for a new 2008 performance measure targeting risk reduction.



**Target #2:**98% of new spills are cleaned up or are in monitoring status. **Measure #2:** % of new spills are cleaned up or are in monitoring status.

Analysis of results and challenges: The sooner a spill of oil or hazardous substances is contained and cleaned, the less impact it will have on the environment, on human health and on the economy. Our goal is to respond to, contain, and clean up spills as they occur to prevent them from causing wide-spread damage to water sources, land, wildlife, and adjoining properties.

When sites are in monitoring status, they have been cleaned to a point that allows continued use of the site. Frequently, this will include removing and storing contaminated soils, which are monitored during field visits until the contamination has declined to a level that meets acceptable state standards.

Only the largest and most complex new spills (for example, spills that impact ground water) are turned over to the contaminated sites program for long-term remediation.

Data indicates that in FY2006, 99.5% of new spills reported were contained and cleaned to a point that allows continued use of property with no further cleanup action required.

# A1: Strategy - Establish standards for protection from spills of oil and hazardous substances.

**Target #1:**Review and update all regulations by FY2009. **Measure #1:** % of regulations reviewed and updated.

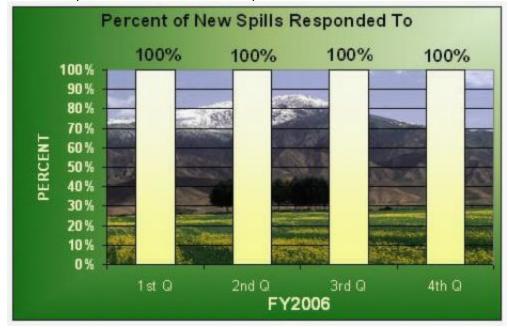


**Analysis of results and challenges:** As part of the Department's 4-year plan, regulations governing contingency plan (C-plan) preparation are being reviewed for clarity and effectiveness toward meeting the objectives they are meant to accomplish.

The division has completed Phase 1 of a four-phase, multi-year project to comprehensively review, revise, and update the C-plan regulations at 18 AAC 75. Phase 1 was an update of C-plan regulations for oil exploration and production facilities. Final regulations for Phase 1 became effective May 26, 2004. Phase 2, a review and update of the oil pollution prevention regulations, has begun. Phase 3 will consist of a review and revision of the C-plan approval process, and Phase 4 will be a comprehensive update of general C-plan requirements. We do not anticipate any challenges with meeting this goal.

# A2: Strategy - Contain and cleanup incidents of contamination to the environment from oil and hazardous substance spills.

**Target #1:**100% response to reports of new contamination from oil and hazardous substance spills. **Measure #1:** % of reports of new contamination responded to.



**Analysis of results and challenges:** Regulations require that spills of oil or hazardous substances be reported to the department. Depending on the size and nature of the spill, a response may range from providing verbal instruction to the responsible party to deployment of division staff, equipment, and contractors. Regardless of size, the sooner a spill of oil or hazardous substances is contained and cleaned, the less impact it will have on the environment, on human health and on the economy.

The division has been able to respond to all new spills reported.

# A3: Strategy - Prevent spills of oil and hazardous substances.

Target #1:Reduce number of new spills of oil and hazardous substances from regulated industry.

Measure #1: % change in number of new spills of oil and hazardous substances from regulated industry.



Analysis of results and challenges: Regulated industry includes such things as oil exploration and production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms and tankers, non-crude oil tank vessels and barges, and non-tank vessels. Regulations require that new spills be reported, regardless of source. However, because of the high volume of oil handled or carried by these entities, and the potential consequences of a major spill, additional requirements are placed upon them, including development of spill prevention plans and contingency plans for response to spills.

The increase in spills in the third quarter is consistent with quarterly data from previous years and is due to increased oil production, exploration, and transportation that occur in the spring. Additionally, as harsher weather begins to subside, spills that occurred during the winter months are discovered.

Certain components of oil facilities are not regulated under state law. A challenge with interpreting and recording this data is identifying whether the spill originated from the regulated component of the facility.

# **Component: Contaminated Sites Program**

## **Contribution to Department's Mission**

Protect public health and the environment by identifying, overseeing and conducting the cleanup, redevelopment, and management of contaminated sites in Alaska.

#### **Core Services**

- Identify, assess, rank, prioritize, and track all contaminated sites in Alaska.
- Oversee the cleanup and long term monitoring of contaminated sites in Alaska.
- Conduct cleanups of highest-priority state-owned, privately owned, and orphan sites using a risk based approach.
- Manage cleanup and provide regulatory oversight for military, federal agency, private party and State owned contaminated sites.
- Provide regulatory oversight, technical assistance, and policy development to Department of Defense and Federal Civilian Agencies on environmental cleanup activities.
- Negotiate with responsible parties, private or federal, for funding agreements to provide effective cleanup of contaminated sites.
- Manage conditionally closed contaminated sites to ensure risk is appropriately controlled over time.
- Provide technical assistance to responsible parties of contaminated sites.

| End Results  | Strategies to Achieve Results   |
|--|---|
| A: Risk from contamination at historical contaminated sites is reduced.  Target #1: 10% increase from the previous year in the number of historical contaminated sites remediated.  Measure #1: % increase from the previous year in the number of historical contaminated sites remediated. | A1: Reduce historical contamination.  Target #1: Remediation of historical contamination.  Measure #1: % of existing contaminated sites closed or conditionally closed. |

## **Major Activities to Advance Strategies**

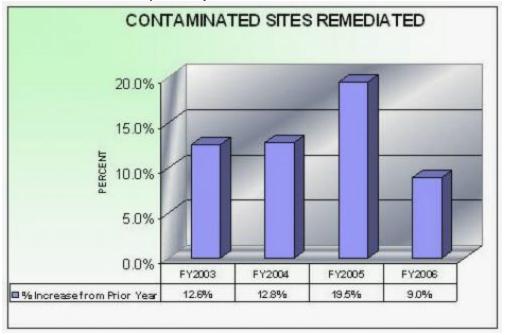
- Provide regulatory oversight and management of contaminated sites to facilitate closures.
- Conduct cleanups of state owned and orphan sites.
- Manage long term monitoring of conditionally closed sites to limit risk to public health and the environment.

| FY2008 Resources Allocated to Achieve Results |                      |    |  |
|---|----------------------|----|--|
| FY2008 Component Budget: \$7,147,500          | Personnel: Full time | 65 |  |
| •       | Part time            | 0  |  |
|   | Total                | 65 |  |

#### Performance Measure Detail

## A: Result - Risk from contamination at historical contaminated sites is reduced.

**Target #1:**10% increase from the previous year in the number of historical contaminated sites remediated. **Measure #1:** % increase from the previous year in the number of historical contaminated sites remediated.



Analysis of results and challenges: Alaska has many sites that have been contaminated with oil or hazardous substances. Most of the contamination is historic, much of it occurring before the risks to the environment and human health were known, and additional historic contaminated sites are discovered almost daily. Severely contaminated sites may also have adverse economic and social impacts in terms of cleanup costs, or limitations on land use or land sales or transfers.

2006 performance data shows that our 10% increase goal was not met. In 2005, the goal was exceeded by a significant amount due to the completion of cleanup at the former Adak Naval Air Station, which was comprised of 170 individual sites. That huge increase in closures was a one-time impact. But in additional to the anomaly in closures in 2005, the Contaminated Sites program has also seen a change in our cleanup strategy to focus short term resources at sites with a higher level risk to human health and the environment. When performing cleanups, we now focus on removing risk rather than reaching closure. Once risk is reduced at a site to a point where human health is not impacted, resources are then directed toward other sites where risk is still a factor – even though the first site has not been closed. Due to this change in our strategy, Contaminated Sites is implementing a new measurement tool to allow tracking of risk reduction, in addition to closures. This new tool will be available to track data for a new 2008 performance measure targeting risk reduction.

## A1: Strategy - Reduce historical contamination.

Target #1:Remediation of historical contamination.



**Analysis of results and challenges:** Alaska has many sites that have been contaminated with oil or hazardous substances. Additional sites are discovered almost daily. Most of the contamination is historic, much of it occurring before the risks to the environment and human health were known. Severely contaminated sites may also have adverse economic and social impacts in terms of cleanup costs, or limitations on land use or land sales or transfers.

It is important that historic contaminated sites are found and reported, so that appropriate steps can be taken to protect the public. However, as the data shows, for every site that is cleaned or cleaned to a point that allows a conditional closure, nearly as many contaminated sites are discovered each year, making it a challenge to show progress toward reducing the number of contaminated sites in the state.

Our goal is to be able to continue remediating sites at a rate that maintains the relative percentage of total sites remediated the previous year. Results will continue to fluctuate depending on the number of new historic sites discovered as well as the amount of work necessary to reduce the risk at those and already existing sites.

# **Component: Industry Preparedness and Pipeline Operations**

### **Contribution to Department's Mission**

Protect public safety, public health and the environment by ensuring that producers, transporters and distributors of crude oil and refined oil products prevent oil spills, and are fully prepared materially and financially to clean up spills.

#### **Core Services**

- Review and approval of oil discharge prevention and contingency plans.
- · Conduct and participate in spill drills to verify by demonstration that regulated operators are in compliance with state response planning requirements.
- Inspect regulated facilities and vessels to provide assistance and to ensure compliance with state spill prevention and Best Available Technology (BAT) requirements.
- Review and approve applications for proof of financial responsibility to ensure that regulated operators have the financial resources to respond to an oil spill and mitigate environmental damage.
- Register oil spill primary response action contractors identified in oil discharge prevention and contingency plans.
- Regulate and provide technical assistance and training to underground storage tank operators and owners to ensure proper tank operation and maintenance and basic spill prevention.
- Certify third party underground storage tank inspectors.

| End Results   | Strategies to Achieve Results  |  |
|---|--|--|
| A: Regulated facilities and vessel operators are able to prevent and respond to spills of oil and hazardous substances.   | A1: Review oil discharge prevention and contingency plan requirements and update regulations as necessary.   |  |
| Target #1: 100% of regulated facilities and vessel operators are without major violations of their contingency plans.  Measure #1: % of regulated facilities and vessels operators are without major violation of their contingency plans within the past year. | Target #1: Oil discharge prevention and contingency plan regulations are reviewed and updated by FY2009.  Measure #1: % of review and update of oil discharge prevention and contingency plan regulations complete.  A2: Review and approve contingency plans. |  |
|   | Target #1: Contingency plan applications are reviewed within the regulatory timeframes.  Measure #1: % contingency plan applications reviewed within the regulatory timeframes.  |  |
|   | A3: Conduct exercises and inspections of regulated facilities and vessel operators.  |  |
|   | Target #1: Annually 100% of contingency plan holders identified as high risk, are inspected or participate in an oil discharge exercise.  Measure #1: % of annual targeted inspections and exercises completed.  |  |

## **Major Activities to Advance Strategies**

- Review oil discharge prevention and contingency plan requirements and improve and expand the regulations to increase clarity and effectiveness.
- Review and expand oil spill prevention oversight of industry, including new regulations and increased regulatory oversight of higher risk operations.

## **Major Activities to Advance Strategies**

- Review regulated facility and vessel applications for compliance with oil discharge prevention and contingency plan requirements.
- Inspect and conduct spill response exercises at facilities and vessels identified as high risk.

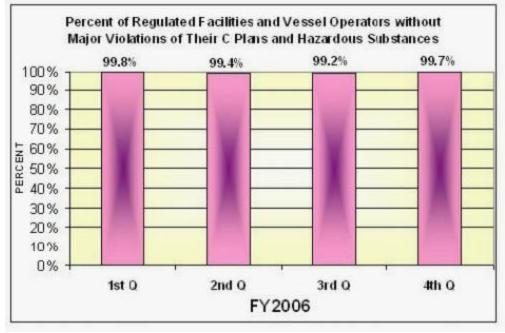
| FY2008 Resources Allocated to Achieve Results |                      |    |  |
|---|----------------------|----|--|
| FY2008 Component Budget: \$5,297,800          | Personnel: Full time | 45 |  |
|   | Part time            | 1  |  |
|   | Total                | 46 |  |

#### **Performance Measure Detail**

A: Result - Regulated facilities and vessel operators are able to prevent and respond to spills of oil and hazardous substances.

**Target #1:**100% of regulated facilities and vessel operators are without major violations of their contingency plans.

**Measure #1:** % of regulated facilities and vessels operators are without major violation of their contingency plans within the past year.



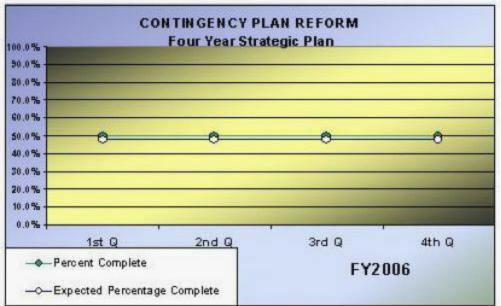
Analysis of results and challenges: In Alaska, several types of regulated facilities and vessel operators are required to have approved contingency plans (C-plans) in place before they are allowed to operate. These C-plans outline the various steps and procedures that would be followed to allow quick and effective containment and cleanup in the event of an unanticipated release of oil or hazardous substances into the environment. The quicker and more effective the response is, the less adverse impact a spill will have on the environment and human health.

Facilities and operators required to have C-plans include oil exploration and oil production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms, and tankers, non-crude oil tank vessels and barges, and non-tank vessels. C-plans must be submitted every 5 years and are reviewed and approved by Department staff to ensure all response requirements are addressed. Examples of major violations would include such things as insufficient or unusable response equipment, lack of required contracts with response action contractors, or significant changes to a facility's oil storage capacity without a corresponding amendment of the C-plan.

This data indicates that 99.7% of facilities and vessels operators that are required to have C-plans strive to keep them updated and will be prepared to appropriately respond in the event of an unexpected spill.

# A1: Strategy - Review oil discharge prevention and contingency plan requirements and update regulations as necessary.

**Target #1:**Oil discharge prevention and contingency plan regulations are reviewed and updated by FY2009. **Measure #1:** % of review and update of oil discharge prevention and contingency plan regulations complete.

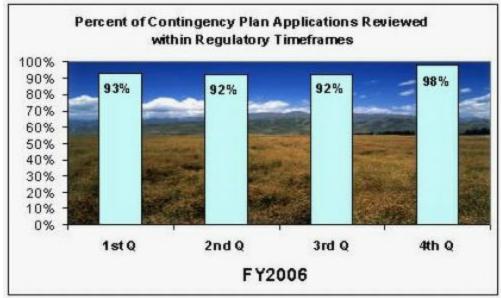


Analysis of results and challenges: In Alaska, several types of facilities and vessel operators are required to have approved contingency plans (C-plans) in place before they are allowed to operate. These C-plans outline the various steps and procedures that would be followed to allow quick and effective containment and cleanup in the event of an unanticipated release of oil or hazardous substances into the environment. The quicker and more effective the response is, the less adverse impact a spill will have on the environment and human health.

As part of the Department's 4-year plan, regulations governing C-plan preparation and approval are being reviewed for clarity and effectiveness. The overall goal is to have the regulations reviewed and updated by the end of FY2007. Phase 1 of this 4-phase project has been completed in FY2006 and Phase 2 is nearly complete. No impediments to meeting the overall goal have been identified.

### A2: Strategy - Review and approve contingency plans.

**Target #1:**Contingency plan applications are reviewed within the regulatory timeframes. **Measure #1:** % contingency plan applications reviewed within the regulatory timeframes.



Analysis of results and challenges: In Alaska, several types of facilities and vessel operators are required to have approved contingency plans (C-plans) in place before they are allowed to operate. These C-plans outline the various steps and procedures that would be followed to allow quick and effective containment and cleanup in the event of an unanticipated release of oil or hazardous substances into the environment. The quicker and more effective the response is, the less adverse impact a spill will have on the environment and human health.

Facilities and operators required to have C-plans include oil exploration and oil production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms, and tankers, non-crude oil tank vessels and barges, and non-tank vessels. C-plans must be submitted every 5 years and are reviewed and approved by Department staff to ensure all response requirements are addressed.

Since these facilities and vessels operators cannot legally operate without approved C-plans, it is imperative that department staff review and approve the plans within the time frames required by regulation. Thus far, this goal has been met and future challenges to attaining the goal are not anticipated.

# A3: Strategy - Conduct exercises and inspections of regulated facilities and vessel operators.

**Target #1:**Annually 100% of contingency plan holders identified as high risk, are inspected or participate in an oil discharge exercise.

Measure #1: % of annual targeted inspections and exercises completed.



**Analysis of results and challenges:** In Alaska, several types of facilities and vessel operators are required to have approved contingency plans (C-plans) in place before they operate. These C-plans outline the various steps and procedures that would be followed to allow quick and effective containment and cleanup in the event of an unanticipated release of oil or hazardous substances into the environment. The quicker and more effective the response is, the less adverse impact a spill will have on the environment and human health.

Facilities and operators required to have C-plans include oil exploration and oil production facilities, refineries, railroads, crude oil pipelines, terminals, tank farms, oil tankers, non-crude oil tank vessels and barges, and non-tank vessels over 400 gross tons. C-plans must be submitted every 5 years and are reviewed and approved by Department staff to ensure all response requirements are addressed.

Facilities and vessels in the state that handle crude oil are considered a higher risk because of the larger volumes of oil involved and the increased environmental consequences of a crude oil spill compared to refined oil product spill of a similar magnitude. As an added precaution, is it important to inspect high risk facilities to ensure compliance with their C-plan, or to test C-plan effectiveness by conducting exercises. In an exercise, a mock spill is conducted, and the C-plan response procedures are applied as though it were a real life situation, in order to test and ensure their effectiveness.

The annual cumulative totals typically exceed 100% due to repeat inspections and/or exercises at some facilities.

# **Component: Prevention and Emergency Response**

## **Contribution to Department's Mission**

Protect public safety, public health and the environment by preventing and mitigating the effects of oil and hazardous substance releases and ensuring their cleanup through government planning, preparedness and rapid response.

#### **Core Services**

- Lead the state's response and protect public and environmental resources from the effects of some 2,100 spills of oil and hazardous substances.
- Minimize the damage to public health and the environment by implementing the Incident Command System for large events.
- Oversee cleanup by the responsible party to ensure spills are cleaned up as quickly as possible.
- Intervene when spill response is inadequate.
- Integrate coastal and inland Alaska communities into a statewide response system through local response agreements.
- Provide equipment and training to local personnel and communities participating in the Alaska Spill Response Depot/Corps System.
- Prevent and reduce the occurrence of oil spills and hazardous substance releases from unregulated sources.
- Plan, develop and coordinate the statewide hazardous materials response team to protect public health and the environment from the effects of hazardous substance releases.
- Maintain the Federal/State Unified Plan and the ten Sub-area/Regional Contingency Plans for Alaska.
- Enforce statutes and regulations relating to oil and hazardous substance spill reporting, cleanup and restoration of the environment.

| End Results   | Strategies to Achieve Results   |
|---|---|
| A: Risk from new spills of oil and hazardous substances by regulated and unregulated entities, is | A1: Clean up new oil and hazardous substance spills.  |
| eliminated.   | Target #1: 98% of new oil and hazardous substance spills are cleaned up or are in monitoring status.  |
|   | Measure #1: % of new oil and hazardous substance spills that are cleaned or are in monitoring status. |

# **Major Activities to Advance Strategies**

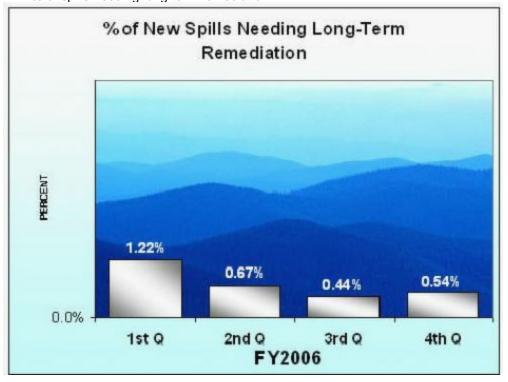
- Ensure emergency response and removal of oil and hazardous substance releases.
- Increase funding for full-time agency oil and hazardous substance prevention, response, and oversight of North Slope exploration and production.
- Implement a Clean Marina/Fishing Vessel spill prevention pilot project and evaluate the project for statewide application.

| FY2008 Resources Allocated to Achieve Results |                      |    |  |
|---|----------------------|----|--|
| FY2008 Component Budget: \$4,758,700          | Personnel: Full time | 39 |  |
|   | Part time            | 0  |  |
|   | Total                | 39 |  |
|   |                      |    |  |

#### **Performance Measure Detail**

A: Result - Risk from new spills of oil and hazardous substances by regulated and unregulated entities, is eliminated.

**Target #1:**No new spills result in long-term remediation. **Measure #1:** % of spills needing long-term remediation.



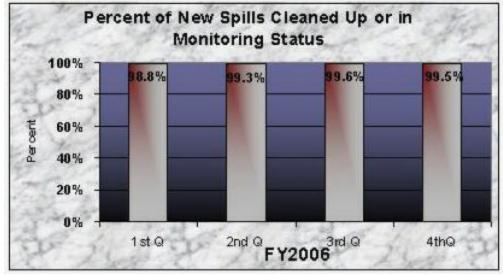
**Analysis of results and challenges:** The sooner a spill of oil or hazardous substances is contained and cleaned, the less impact it will have on the environment, on human health and on the economy. Our goal is to respond to, contain, and clean spills as they occur to prevent them from causing wide-spread damage to water sources, land, wildlife, and adjoining properties.

Only the largest and most complex new spills, for example, spills that impact ground water, are turned over to the contaminated sites program for long-term remediation.

Data indicates that less than 1% (0.54%) of the new spills were transferred to the Contaminated Sites Program for long-term remediation in the last quarter of FY2006.

# A1: Strategy - Clean up new oil and hazardous substance spills.

**Target #1:**98% of new oil and hazardous substance spills are cleaned up or are in monitoring status. **Measure #1:** % of new oil and hazardous substance spills that are cleaned or are in monitoring status.



**Analysis of results and challenges:** The sooner a spill of oil or hazardous substances is contained and cleaned, the less impact it will have on the environment, on human health and on the economy. Our goal is to respond to, contain, and clean spills as they occur to prevent them from causing wide-spread damage to water sources, land, wildlife, and adjoining properties.

When sites are in monitoring status, they have been cleaned to a point that allows continued use of the site. Frequently, this will include removing and storing contaminated soils, which are monitored during field visits until the contamination has declined to a level that meets acceptable state standards.

Only the largest and most complex new spills, for example, spills that impact ground water, are turned over to the contaminated sites program for long-term remediation.

Data indicates that over 99% (99.28%-yearly average) of new spills are contained, cleaned up or in monitoring status.

# **Component: Response Fund Administration**

## **Contribution to Department's Mission**

Manage the Oil and Hazardous Substance Release Prevention and Response Fund as a viable, long-term funding source for the state's core spill prevention and response initiatives and provide administrative support services to divisions programs.

### **Core Services**

- Management of the Prevention and Response Accounts of the Oil and Hazardous Substance Release Prevention and Response Fund.
- Recover state costs for responding to spills.
- Track and report all operating and capital expenditures and fund source balances to program managers monthly.
- Manage and coordinate receipt and expenditure of federal dollars for cleanup of federal facilities.
- Develop cost controls and standardize division contracts.
- Manage term contracts and issue Notices to Proceed (NTPs).
- Provide guidance and assistance to other Spill Prevention and Response programs in general administrative functions such as budget preparation, expenditure tracking, human resources, and procurement.
- Provide administrative and financial support during emergency spill response situations.
- Manage and track funding under the charter agreement.
- Manage Reimbursable Services Agreements for the division.

| End Results   | Strategies to Achieve Results   |
|---|---|
| A: State is reimbursed for funds spent on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities.  | A1: Provide adequate documentation to the Department of Law for cost recoverable sites. |
| Target #1: 80% of cost recoverable state funding spent on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities is recovered.  Measure #1: % of state funding reimbursed for cost recoverable expenditures incurred on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities. | documentation for billings.   |

## **Major Activities to Advance Strategies**

- Identify and pursue sources of cost recovery to assist in funding response, removal and remediation of oil and hazardous substance releases.
- Manage term contracts and issue Notices to Proceed to implement cleanup of contaminated sites.
- Provide financial management of federal contracts to ensure expenditure of federal dollars are maximized and spent appropriately.

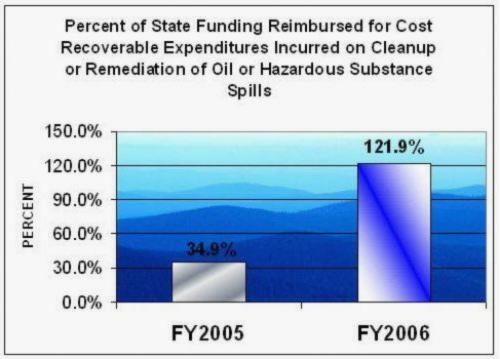
| FY2008 Resources Allocated to Achieve Results |                         |   |
|---|-------------------------|---|
| FY2008 Component Budget: \$1,547,300          | Personnel:<br>Full time | 5 |
|   | Part time               | 0 |
|   | Total                   | 5 |
|   |                         |   |

#### **Performance Measure Detail**

A: Result - State is reimbursed for funds spent on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities.

**Target #1:**80% of cost recoverable state funding spent on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities is recovered.

**Measure #1:** % of state funding reimbursed for cost recoverable expenditures incurred on cleanup or remediation of oil or hazardous substance spills caused by private and/or federal entities.



Analysis of results and challenges: When the state incurs expenditures for response, cleanup, or remediation of a spill or contamination caused by oil or hazardous substances, we are obligated to try to recover those costs. Once a party or parties responsible for a spill or contamination is identified, they are notified of their possible financial responsibility. In cases lacking an identified responsible party the state either absorbs the cost of cleanup or requests reimbursement through the National Pollution Fund Center if it is determined that the spill condition meet their specific criteria. State expenditures for travel, contractual, supplies, equipment, and legal guidance are tracked for each site. Staff time is tracked and an average salary cost for each position classification is applied to ensure that personal services costs are equitably charged. As costs accumulate, a summary invoice with backup documentation is prepared on a quarterly basis and forwarded to project managers for review and validation. Billing packages are forwarded to Department of Law where they are reviewed and sent to the responsible party(s).

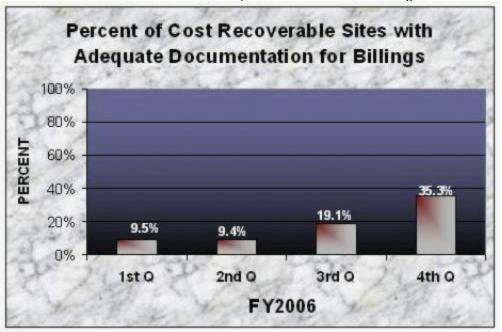
Cost are not usually recovered in the same year as the expenditures. After billings are sent, it may take several

months, or even several years to actually recover costs. Due to the time lag between billings and receipt of payments, more may be recovered in a single year than was expended. Data that covers several years will provide the best picture of cost recovery success.

Cost recovery efforts for the Selendang response were quite extensive, complex and time consuming to prepare which created a backlog in the daily cost recovery efforts. During the last 6 months of the fiscal year, cost recovery efforts were directed to reducing the backlog.

# A1: Strategy - Provide adequate documentation to the Department of Law for cost recoverable sites.

**Target #1:**Adequate documentation is provided for 100% of cost recoverable sites. **Measure #1:** % of cost recoverable sites with adequate documentation for billings.



Analysis of results and challenges: When the state incurs expenditures for response, cleanup, or remediation of a spill or contamination from oil or hazardous substances caused by non-state entities, we are obligated to try to recover those costs. Once a party or parties responsible for a spill or contamination is identified, they are notified of their possible financial responsibility. State expenditures for travel, contractual, supplies, equipment and legal guidance are tracked for each site. Hours spent by staff are tracked and documented on Site Logs, and an average salary cost is applied so that personal services costs are equitably charged rather than being based on actual range and step of an employee. As costs accumulate, a summary invoice with backup documentation is prepared on a quarterly basis and forwarded to project managers for review and validation. Project managers forward the approved billing packages to Department of Law. Billings are reviewed and sent to the responsible party(s) by the Department of Law.

During the last 6 months of FY2006, cost recovery efforts were directed to the backlog that was created due to the Selendang response. We continue cost recovery on the Selendang and because this is more manageable, the division has made considerable progress toward decreasing the backlog.

# **Water Results Delivery Unit**

## **Contribution to Department's Mission**

Protect water quality and assist communities in improving sanitation conditions.

#### **Core Services**

- Improve water quality conditions where they are below public health or environmental standards.
- Issue wastewater discharge permits to facilities and operations that release potentially harmful pollutants.
- Ensure facility compliance with permit conditions.
- Provide community assistance for the protection of water quality.
- Develop user friendly public access to water quality data.
- Provide grants, loans and engineering assistance for drinking water, sewerage, and solid waste facilities.
- Provide training programs for and certification of water and sewerage system operators.
- Provide over-the-shoulder and emergency assistance to system operators in remote communities.

| End Results  | Strategies to Achieve Results   |  |
|--|---|--|
| A: Water quality is protected.   | A1: Establish protective standards for water quality.   |  |
| Target #1: No polluted waters.  Measure #1: Number of polluted waters. | Target #1: Protective standards are established for Water Quality are complete by June 30, 2007.  Measure #1: % of revisions to targeted standards for Water Quality are complete by June 30, 2007. |  |
|  | Target #2: Submit a complete NPDES Primacy application to EPA by June 30, 2006.  Measure #2: of the NPDES Primacy application completed by June 30, 2006.   |  |
|  | A2: Assume control from the EPA of National<br>Pollutant Discharge Elimination System (NPDES) as<br>established in the Clean Water Act.   |  |
|  | Target #1: 100% of EPA information requests are responded to within agreed upon timeframes.  Measure #1: % of EPA information requests are submitted on time.                                       |  |
|  | Target #2: 100% of new positions are filled and trained.  Measure #2: % of new positions that are filled and trained.   |  |
|  | A3: Restore polluted waterbodies to their designated uses.  |  |
|  | Target #1: Two waterbody recovery plans per year.  Measure #1: Number of polluted waterbody recovery plans completed during the year.   |  |
|  | <u>Target #2:</u> Ten active restoration projects per year. <u>Measure #2:</u> Number of active restoration projects during the year.   |  |

|   | A4: Issue discharge permits/authorizations.   |  |  |
|---|---|--|--|
|   | Target #1: 100% of known dischargers have current permits/authorizations.  Measure #1: % of known dischargers have current permits/authorizations.  |  |  |
|   | A5: Enforce compliance with permit/authorization conditions.  |  |  |
|   | Target #1: Permit holders are compliant with permit/authorization terms and conditions.  Measure #1: % of permit holders requiring enforcement actions.   |  |  |
| End Results   | Strategies to Achieve Results   |  |  |
| B: Citizens are protected from unsafe sanitation facilities.  Target #1: 100% serviceable rural Alaska homes are served by safe and sustainable sanitation facilities.  Measure #1: % of serviceable rural Alaska homes served by safe and sustainable sanitation facilities. | B1: Allocate funding based on health related needs.  Target #1: 2.5% annual reduction in rural sanitation deficiencies that are health related.  Measure #1: % reduction of rural sanitation deficiencies that are health related.  B2: Increase operator certification compliance.  Target #1: 2% annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.  Measure #1: % annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements. |  |  |

# **Major Activities to Advance Strategies**

- Identify Best Management Practices (BMP's) addressing all types of non-point source pollution.
- Ensure water quality standards to protect all uses of Alaska's fresh and marine waters.
- Monitor water quality and report on the health of Alaska's waters.
- Enforce the State's wastewater discharge standards through the review of cruise vessel monitoring reports and conduct independent DEC sampling.
- Conduct inspections and follow up with facility operators to correct noncompliance or take enforcement actions.
- Administer grants and loans.
- Provide engineering and technical assistance to communities.
- Train water and wastewater facility operators.

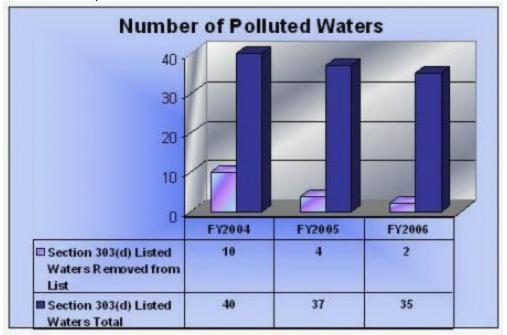
| FY2008 Resources Allocated to Achieve Results     |                      |     |  |  |
|---|----------------------|-----|--|--|
| FY2008 Results Delivery Unit Budget: \$24,374,800 | Personnel: Full time | 120 |  |  |
|   | Part time            | 0   |  |  |
|   | Total                | 120 |  |  |

#### Performance Measure Detail

# A: Result - Water quality is protected.

Target #1:No polluted waters.

Measure #1: Number of polluted waters.

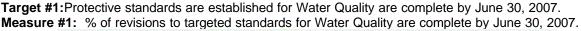


**Analysis of results and challenges:** Water Quality Standards, found in 18 AAC, designate specific uses for which water quality must be protected (e.g., drinking water, aquatic life) and specifies the pollutant limits, or criteria necessary to protect designated uses. There are seven designated uses for freshwater and seven for marine waters. By default, waterbodies in Alaska are protected for all designated uses. The few waterbodies that have had some uses removed are listed in the water quality standards.

The Department of Environmental Conservation (DEC) uses Water Quality Standards as the criteria to determine if a waterbody is polluted. For example, if waterbody monitoring data consistently shows high concentrations of a substance that is not suitable for aquatic life then that waterbody is considered polluted (or impaired) for that designated use. Alaska formally reports the status and trends of its waters every two years in the Integrated Water Quality Monitoring and Assessment Report. The report includes information on the general health of Alaska's waters, DEC water protection programs and a list of impaired waterbodies, and how the impairment is being addressed or proposed to be addressed. Waterbodies are placed in one of five categories based upon known information. The report meets Alaska's responsibilities under Section 303(d) of the Clean Water Act to identify polluted waters.

As of the end of FY2006, there are 35 waterbodies listed in Category 5 - Impaired and Requiring a Total Maximum Daily Load (TMDL), which is essentially a waterbody corrective action plan. The waterbodies are scheduled for development of a TMDL over a seven-year period. Once a TMDL has been developed, an impaired water is moved into Category 4, which lists those waters which are impaired but for which a TMDL or other recovery plan is in place, In FY2006, 2 TMDLs were completed.

## A1: Strategy - Establish protective standards for water quality.



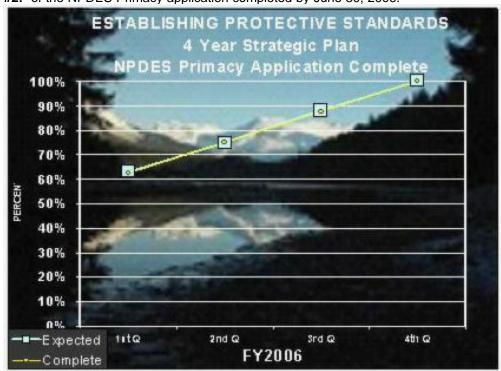


Analysis of results and challenges: The federal Clean Water Act requires DEC to review and update the Alaska Water Quality Standards every three years. These standards describe the chemical, physical and biological condition of state waters (e.g. coastal marine waters, lakes, rivers) necessary to protect human health and the aquatic life living in and using the water. Water Quality Standards are used to determine wastewater permit discharge requirements, to assess whether waterbodies are polluted, and to set cleanup goals for polluted waterbody recovery plans. DEC uses both national and Alaska-specific scientific studies and regulatory policies to ensure the Water Quality Standards are relevant to Alaska's conditions and needs.

DEC has completed adoption of revised standards for mixing zones, residues, dissolved oxygen, and analytical testing methods. Progress was slowed during the third quarter of FY2006 while staff were analyzing and responding to numerous public comments and conducting interagency consultation on the mixing zone regulation revision. DEC is facilitating the U.S. Environmental Protection Agency review and approval of the new state Water Quality Standards, as required by the Clean Water Act. DEC is also consulting with federal agencies on Essential Fish Habitat and the Endangered Species Act review of the new standards.

In FY2007, DEC will complete this Water Quality Standards review by proposing a new procedure for implementing natural condition-based standards for those waters where water quality is naturally lower than the default statewide standard. DEC will also assess options for further revisions to Water Quality Standards by developing a new 3-year workplan.

Further information on the Water Quality Standards may be found at: http://www.state.ak.us/dec/water/wqsar/trireview/trireview.htm.



**Target #2:**Submit a complete NPDES Primacy application to EPA by June 30, 2006. **Measure #2:** of the NPDES Primacy application completed by June 30, 2006.

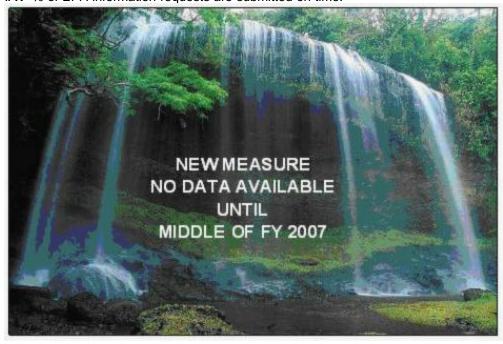
Analysis of results and challenges: Section 402 of the Clean Water Act (CWA) requires that all discharges to surface waters be permitted under the National Pollutant Discharge Elimination System (NPDES) permit program. The CWA intends for states to implement (to have "primacy" for) the NPDES program with the Environmental Protection Agency (EPA) acting in an oversight role. EPA is currently the NPDES authority in Alaska. DEC plays a secondary role certifying that EPA permits meet state water quality standards and issuing state permits for small discharges that EPA cannot get to.

On August 27, 2005 the Governor signed Senate Bill 110, which directed DEC to seek and assume primacy for the NPDES wastewater permit program. DEC submitted the primacy application to EPA for their approval on June 30, 2006 in accordance with statutory deadline. The application included:

- 1. A letter from the Governor requesting approval of the state's application;
- 2. A Program Description that describes how the state will issue permits, ensure permit compliance, perform enforcement, fund the program, track issued permits and enforcement actions, and submit periodic reports to EPA:
- 3. A signed Memorandum of Agreement (MOA) between the state and EPA that establishes timeframes for the state to assume authority for the program components over a five-year period;
- 4. An Attorney General statement of legal authority that confirms the state's laws and regulations are sufficient to implement the NPDES program; and
- 5. Statutes and Regulations.
- 6. A Continuing Planning Process document that discusses how the Department implements revised Water Quality Standards, determines permit issuance priority, and ranks waste treatment works construction.

# A2: Strategy - Assume control from the EPA of National Pollutant Discharge Elimination System (NPDES) as established in the Clean Water Act.

**Target #1:**100% of EPA information requests are responded to within agreed upon timeframes. **Measure #1:** % of EPA information requests are submitted on time.



**Analysis of results and challenges:** On August 27, 2005 the Governor signed Senate Bill 110, which directs DEC to seek and assume primacy for the National Pollutant Discharge Elimination System wastewater permit and compliance program. DEC submitted an application to EPA for their approval on the legislatively mandated deadline – June 30, 2006.

EPA will submit a list of comments on the application. DEC will respond to information requests and supplement gaps in the application within agreed upon timeframes. This process will continue until primacy for the NPDES wastewater permit program is approved.

This is a new measure for FY2007 – Data should be available by the third quarter.

More information on the state effort to gain control over the National Pollutant Discharge Elimination System program can be found at: http://www.dec.state.ak.us/water/npdes/npdes.htm

**Target #2:**100% of new positions are filled and trained. **Measure #2:** % of new positions that are filled and trained.



Analysis of results and challenges: A fairly large increase in staff is necessary to implement the National Pollutant Discharge Elimination System wastewater permit and compliance program. Fourteen new positions were approved and are being hired. In order to be ready for program implementation, the new employees receive on the job and formal classroom training in areas such as permitting and compliance as well as gaining expertise in particular industry sectors.

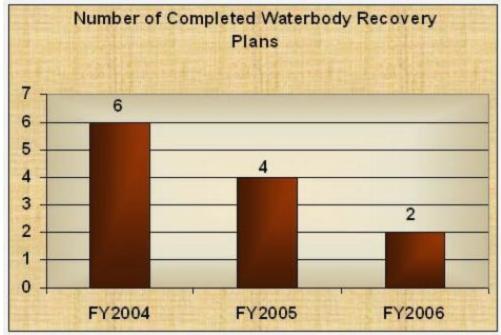
This is a new measure for FY2007 – Data should be available by the third quarter.

More information on the state effort to gain control over the National Pollutant Discharge Elimination System program can be found at: http://www.dec.state.ak.us/water/npdes/npdes.htm

### A3: Strategy - Restore polluted waterbodies to their designated uses.

**Target #1:**Two waterbody recovery plans per year.

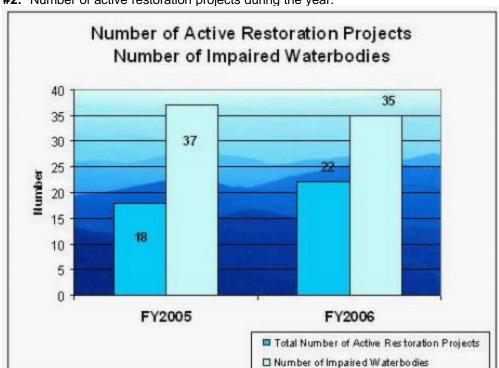
**Measure #1:** Number of polluted waterbody recovery plans completed during the year.



Analysis of results and challenges: When waterbodies are determined to be impaired (when they exceed Water Quality Standards for a particular pollutant), they are added to the Clean Water Act Section 303(d) list of impaired waterbodies submitted to the Environmental Protection Agency (EPA) every two years. It is incumbent upon the State and EPA to work to restore waterbodies. Restoration is accomplished through the development and implementation of either a Total Maximum Daily Load (TMDL) document, a Waterbody Recovery Plan, or through the implementation of permits or other controls. These plans or permits identify the source of the pollutant and the amount of pollutants that can be introduced to the waterbody while still allowing overall recovery to proceed. With this knowledge, parties who discharge pollutants are given an "allowance," or "total maximum daily load" for that pollutant, and/or prescriptive actions called Best Management Practices (BMPs) that they must follow, to stay within that allowance.

The first step toward the recovery of an impaired waterbody is the development of the TMDL or Waterbody Recovery Plan. The EPA is required, by court order, to complete at least two of these documents in Alaska, each year. TMDLs and Waterbody Recovery Plans developed by DEC, either directly through staff work or indirectly through contract or grant efforts, are approved by EPA and can be applied to this legal requirement. EPA may also initiate work on TMDLs or Waterbody Recovery Plans directly, with their staff or contracted efforts.

DEC strongly supports the development and implementation of these plans and has committed to completing a minimum of two per year. In FY2003, two were completed; in FY2004, six were completed; in FY2005 four were completed and in FY2006, two were completed. Implementation is proceeding on all.



**Target #2:**Ten active restoration projects per year. **Measure #2:** Number of active restoration projects during the year.

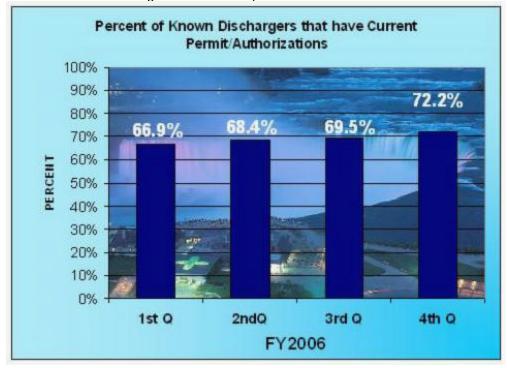
**Analysis of results and challenges:** Polluted or "impaired" waterbodies are identified in the biennial "Integrated Report" submitted by DEC to the Environmental Protection Agency. The target for restoration of these waterbodies is at least 10 active restoration projects per year.

Restoration projects may be conducted by grantees who have received funds through the Alaska's Clean Water Actions (ACWA) grant program, by contractors, by other State agencies, or by DEC personnel.

This is a new measure. Reporting began during the 3rd quarter of FY2004. Data will be reported annually at the end of each fiscal year. At the end of FY2005, 18 restoration projects and FY2006, 22 restoration projects were ongoing on impaired waters.

## A4: Strategy - Issue discharge permits/authorizations.

**Target #1:**100% of known dischargers have current permits/authorizations. **Measure #1:** % of known dischargers have current permits/authorizations.



**Analysis of results and challenges:** The Wastewater Discharge Permit program issues three kinds of wastewater discharge approvals:

- 1) State individual permits and authorizations under 18 AAC 72
- 2) State permits and plan approvals of on-site disposal (septic systems) under 18 AAC 72
- 3) Certification that EPA-issued NPDES permits meet state water quality standards under 18 AAC 70.

State-issued permits and especially authorizations under state general permits, can meet the 100% measure more easily than certification of NPDES permits. This are quick turnaround, predictable discharges and do not require advanced analysis of the impacts. NPDES permits are for large volume, more complex discharges and state certification can be slowed during permit negotiations and responding to comments received by the public on draft permits.

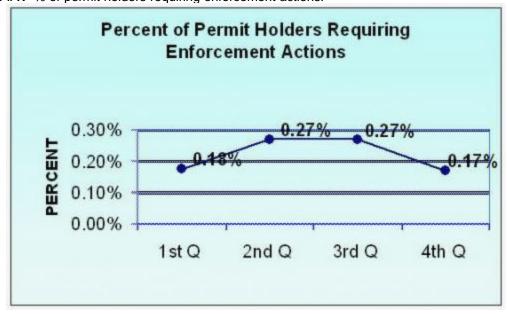
As part of NPDES primacy assumption, some state permits may need to be converted to NPDES permits. DEC and EPA plans to share permit duties as capacity building for primacy. With the transition, the program does not expect to meet its goal of 100% in this fiscal year.

A major tool for tracking and keeping permits current is the new permit database developed in anticipation of NPDES primacy. Achieving the 100% target will be improved with automatic notification of renewals built into the system.

For more information on the Wastewater Discharge Permits program, go to: http://www.dec.state.ak.us/water/wwdp/index.htm

## A5: Strategy - Enforce compliance with permit/authorization conditions.

**Target #1:**Permit holders are compliant with permit/authorization terms and conditions. **Measure #1:** % of permit holders requiring enforcement actions.



Analysis of results and challenges: Log Transfer Facilities: The owners/operators of Log Transfer Facilities may be covered under an EPA General Permit or a State Individual Permit. EPA is the enforcing authority of the conditions of a General Permit. DEC is the enforcing authority for State Individual Permits. For Individual Permits, strict parameters addressing the amount of bark that may be deposited into the waters and onto the bottom of waterbodies are identified as well as methodologies for determining those amounts. Periodic reports on the actions owners/operators take to implement requirements must be submitted. If the reports are found to be lacking, enforcement action is taken.

Waste Water Discharges: During FY2006, the program initiated administrative actions on several instances where regulated facilities (including domestic wastewater treatment plants and cruise ships) were known or suspected to not be in compliance with state requirements.

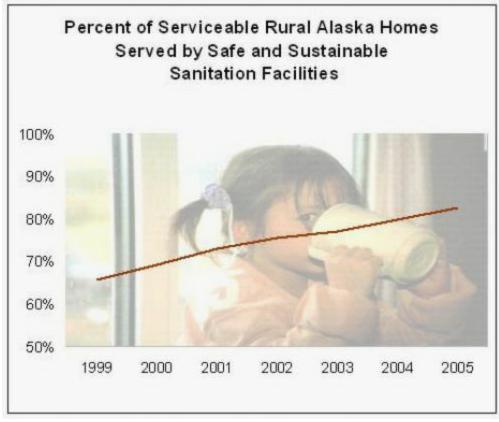
DEC can and does enforce wastewater and water quality regulations as follows:

- For failure to obtain a permit for a discharge to surface or groundwater for activities requiring a permit.
- For failure to meet end-of-pipe limits or for exceeding water quality standards in the receiving water.
- For failure to comply with other permit requirements such as reporting monitoring results.

Typically, staff seeks additional information regarding an alleged violation and/or issue notices of violation to obtain the owner's attention and corrective action. Of the approximately 1000 known wastewater facilities, staff performed 110 on-site inspections in FY2006. Minor compliance issues are identified for the owner/operator for resolution at the time of inspection without formal enforcement actions. In addition to actions reported on permitted facilities, in FY2006 staff issued 10 warning letters and notices of violation, leading to corrective action to dischargers based on inspections and complaints. Civil penalties are pending into FY2007 for some passenger vessel dischargers.

### B: Result - Citizens are protected from unsafe sanitation facilities.

**Target #1:**100% serviceable rural Alaska homes are served by safe and sustainable sanitation facilities. **Measure #1:** % of serviceable rural Alaska homes served by safe and sustainable sanitation facilities.



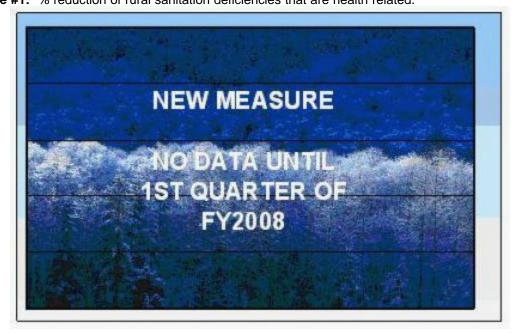
**Analysis of results and challenges:** Rural Alaska is characterized by over 280 isolated villages scattered across an area more than twice the size of Texas. The residents in many of these communities lack drinking water and wastewater infrastructure that is fundamental to protecting public health. The Village Safe Water program works to improve the health and safety of rural Alaskans by assisting communities to plan, design and construct safe and sustainable sanitation infrastructure.

Data to measure progress toward meeting the goal of all serviceable rural Alaska homes being served by safe and sustainable sanitation systems is collected on an annual basis following the prior year's construction season. A serviceable home is defined as an existing home that is occupied year round and located in an area where piped, closed haul or individual septic tanks/ wells are feasible. A sanitation system is defined as sustainable if the community managing it has the financial, technical and managerial capacity to properly operate and maintain it over a period which equals or exceeds the system's design life. For the last six years, the percentage of rural Alaska homes served by adequate sanitation systems has increased by an average of 3% per year. Contingent upon the availability of funding at FY2006 levels, the program's goal continues to be an average increase of 3% per year.

Data to measure progress toward meeting the goal of all serviceable rural Alaska homes being served by safe and sustainable sanitation systems is collected on an annual basis following the prior year's construction season. Data for FY2006 will be available after the second quarter of FY2007.

## B1: Strategy - Allocate funding based on health related needs.

**Target #1:**2.5% annual reduction in rural sanitation deficiencies that are health related. **Measure #1:** % reduction of rural sanitation deficiencies that are health related.

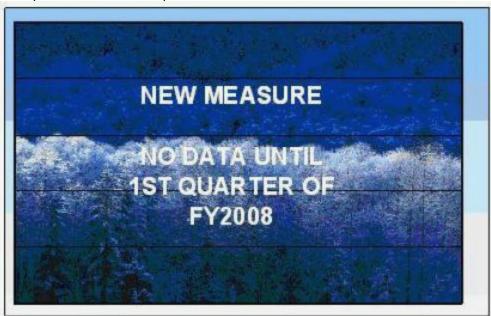


**Analysis of results and challenges:** This is a new measure for FY2007; data will be available during the first quarter of FY2008.

### **B2: Strategy - Increase operator certification compliance.**

**Target #1:2**% annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.

**Measure #1:** % annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.



**Analysis of results and challenges:** This is a new measure for FY2007; data will be available during the first quarter of FY2008.

## **Component: Water Quality**

## **Contribution to Department's Mission**

Identify, abate, and control water pollution in a cost effective, accountable manner to protect public health and preserve the many uses of Alaska's waters.

### **Core Services**

- Issue water quality standards and criteria for the protection of Alaska waterbodies.
- Established streamlined application and authorization of wastewater discharges, storm water management plans, and domestic wastewater system engineering plans.
- Reduce non-point sources of pollution in Alaska waterbodies by identifying and implementing Best Management Practices (BMP's).
- Ensure compliance with wastewater discharge authorizations.
- Ensure cruise vessel compliance with wastewater discharge and air emission standards.
- Provide information about permitted discharges and commercial passenger vessel discharges.
- Conduct ambient water quality and wastewater sampling.
- Prioritize and clean up polluted waters.
- Award and manage grants for stewardship, protection and restoration needs of waters throughout Alaska.
- Certify and provide technical assistance for domestic wastewater disposal systems.

| End Results  | Strategies to Achieve Results   |  |  |
|--|---|--|--|
| A: Water Quality is protected.   | A1: Establish protective standards for Water Quality.   |  |  |
| Target #1: No polluted waters.  Measure #1: Number of polluted waters. | Target #1: Protective standards are established for Water Quality are complete by June 30, 2007.  Measure #1: % of revisions to targeted standards for Water Quality are complete by June 30, 2007. |  |  |
|  | Target #2: Submit a complete NPDES Primacy application to EPA by June 30, 2006.  Measure #2: of the NPDES Primacy application completed by June 30, 2006.   |  |  |
|  | A2: Assume control from the EPA of National Pollutant Discharge Elimination System (NPDES) as established in the Clean Water Act.   |  |  |
|  | Target #1: 100% of EPA information requests are responded to within agreed upon timeframes.  Measure #1: % of EPA information requests are submitted on time.                                       |  |  |
|  | Target #2: 100% of new positions are filled and trained.  Measure #2: % of new positions that are filled and trained.   |  |  |
|  | A3: Restore polluted waterbodies to their designated uses.  |  |  |
|  | Target #1: Two waterbody recovery plans per year.  Measure #1: Number of polluted waterbody recovery plans  |  |  |

completed during the year.

<u>Target #2:</u> Ten active restoration projects per year.

<u>Measure #2:</u> Number of active restoration projects during the year.

A4: Issue discharge permits/authorizations.

<u>Target #1:</u> 100% of known dischargers have current permits/authorizations.

Measure #1: % of known dischargers have current permits/authorizations.

A5: Enforce compliance with permit/authorization conditions.

<u>Target #1:</u> Permit holders are compliant with permit/authorization terms and conditions.

<u>Measure #1:</u> % of permit holders requiring enforcement actions.

## **Major Activities to Advance Strategies**

- Seek state primacy for permitting and compliance activities currently conducted by federal agencies.
- Certify that wetlands fill projects authorized by the Corps of Engineers meet Alaska water quality standards.
- Establish best management practices to control nonpoint pollution and protect water quality.
- Report to the public on the health of Alaska's waters.
- Develop and implement recovery plans for all polluted waters.
- Provide pass-through funding and technical assistance to municipalities, local groups, and other state agencies to address priority issues.
- Revise water quality standards to ensure they continue to protect Alaska's water.
- Continue to improve a risk-based permitting and inspection program for wastewater discharges.
- Implement and improve an on-line permit application, tracking, and reporting system to speed up permit reviews and oversight.
- Establish permit by rule authorizations in regulation.

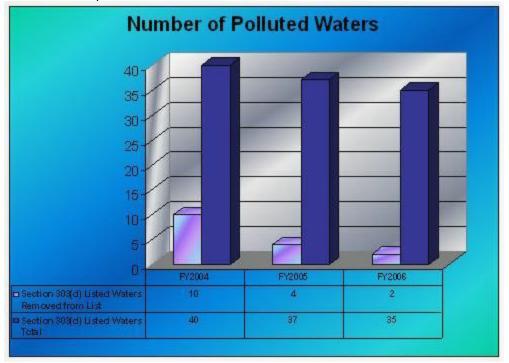
| FY2008 Resources Allocated to Achieve Results |                      |    |  |  |
|---|----------------------|----|--|--|
| FY2008 Component Budget: \$17,646,500         | Personnel: Full time | 86 |  |  |
| •       | Part time            | 0  |  |  |
|   | Total                | 86 |  |  |

### Performance Measure Detail

### A: Result - Water Quality is protected.

Target #1:No polluted waters.

Measure #1: Number of polluted waters.

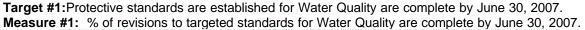


**Analysis of results and challenges:** Water Quality Standards, found in 18 AAC, designate specific uses for which water quality must be protected (e.g., drinking water, aquatic life) and specifies the pollutant limits, or criteria necessary to protect designated uses. There are seven designated uses for freshwater and seven for marine waters. By default, waterbodies in Alaska are protected for all designated uses. The few waterbodies that have had some uses removed are listed in the water quality standards.

The Department of Environmental Conservation (DEC) uses Water Quality Standards as the criteria to determine if a waterbody is polluted. For example, if waterbody monitoring data consistently shows high concentrations of a substance that is not suitable for aquatic life then that waterbody is considered polluted (or impaired) for that designated use. Alaska formally reports the status and trends of its waters every two years in the Integrated Water Quality Monitoring and Assessment Report. The report includes information on the general health of Alaska's waters, DEC water protection programs and a list of impaired waterbodies, and how the impairment is being addressed or proposed to be addressed. Waterbodies are placed in one of five categories based upon known information. The report meets Alaska's responsibilities under Section 303(d) of the Clean Water Act to identify polluted waters.

As of the end of FY2006, there are 35 waterbodies listed in Category 5 - Impaired and Requiring a Total Maximum Daily Load (TMDL), which is essentially a waterbody corrective action plan. The waterbodies are scheduled for development of a TMDL over a seven-year period. Once a TMDL has been developed, an impaired water is moved into Category 4, which lists those waters which are impaired but for which a TMDL or other recovery plan is in place, In FY2006, 2 TMDLs were completed.

### A1: Strategy - Establish protective standards for Water Quality.



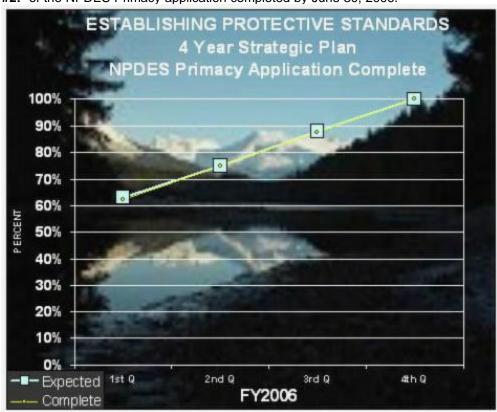


Analysis of results and challenges: The federal Clean Water Act requires DEC to review and update the Alaska Water Quality Standards every three years. These standards describe the chemical, physical and biological condition of state waters (e.g. coastal marine waters, lakes, rivers) necessary to protect human health and the aquatic life living in and using the water. Water Quality Standards are used to determine wastewater permit discharge requirements, to assess whether waterbodies are polluted, and to set cleanup goals for polluted waterbody recovery plans. DEC uses both national and Alaska-specific scientific studies and regulatory policies to ensure the Water Quality Standards are relevant to Alaska's conditions and needs.

DEC has completed adoption of revised standards for mixing zones, residues, dissolved oxygen, and analytical testing methods. Progress was slowed during the third quarter of FY2006 while staff were analyzing and responding to numerous public comments and conducting interagency consultation on the mixing zone regulation revision. DEC is facilitating the U.S. Environmental Protection Agency review and approval of the new state Water Quality Standards, as required by the Clean Water Act. DEC is also consulting with federal agencies on Essential Fish Habitat and the Endangered Species Act review of the new standards.

In FY2007, DEC will complete this Water Quality Standards review by proposing a new procedure for implementing natural condition-based standards for those waters where water quality is naturally lower than the default statewide standard. DEC will also assess options for further revisions to Water Quality Standards by developing a new 3-year workplan.

Further information on the Water Quality Standards may be found at: http://www.state.ak.us/dec/water/wqsar/trireview/trireview.htm.



**Target #2:**Submit a complete NPDES Primacy application to EPA by June 30, 2006. **Measure #2:** of the NPDES Primacy application completed by June 30, 2006.

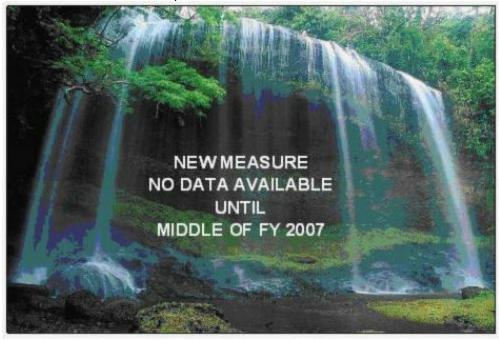
Analysis of results and challenges: Section 402 of the Clean Water Act (CWA) requires that all discharges to surface waters be permitted under the National Pollutant Discharge Elimination System (NPDES) permit program. The CWA intends for states to implement (to have "primacy" for) the NPDES program with the Environmental Protection Agency (EPA) acting in an oversight role. EPA is currently the NPDES authority in Alaska. DEC plays a secondary role certifying that EPA permits meet state water quality standards and issuing state permits for small discharges that EPA cannot get to.

On August 27, 2005 the Governor signed Senate Bill 110, which directed DEC to seek and assume primacy for the NPDES wastewater permit program. DEC submitted the primacy application to EPA for their approval on June 30, 2006 in accordance with statutory deadline. The application included:

- 1. A letter from the Governor requesting approval of the state's application;
- 2. A Program Description that describes how the state will issue permits, ensure permit compliance, perform enforcement, fund the program, track issued permits and enforcement actions, and submit periodic reports to EPA;
- 3. A signed Memorandum of Agreement (MOA) between the state and EPA that establishes timeframes for the state to assume authority for the program components over a five-year period;
- 4. An Attorney General statement of legal authority that confirms the state's laws and regulations are sufficient to implement the NPDES program; and
- 5. Statutes and Regulations.
- 6. A Continuing Planning Process document that discusses how the Department implements revised Water Quality Standards, determines permit issuance priority, and ranks waste treatment works construction.

# A2: Strategy - Assume control from the EPA of National Pollutant Discharge Elimination System (NPDES) as established in the Clean Water Act.

**Target #1:**100% of EPA information requests are responded to within agreed upon timeframes. **Measure #1:** % of EPA information requests are submitted on time.



**Analysis of results and challenges:** On August 27, 2005 the Governor signed Senate Bill 110, which directs DEC to seek and assume primacy for the National Pollutant Discharge Elimination System wastewater permit and compliance program. DEC submitted an application to EPA for their approval on the legislatively mandated deadline – June 30, 2006.

EPA will submit a list of comments on the application. DEC will respond to information requests and supplement gaps in the application within agreed upon timeframes. This process will continue until primacy for the NPDES wastewater permit program is approved.

This is a new measure for FY2007 – Data should be available by the third quarter.

More information on the state effort to gain control over the National Pollutant Discharge Elimination System program can be found at: http://www.dec.state.ak.us/water/npdes/npdes.htm

**Target #2:**100% of new positions are filled and trained. **Measure #2:** % of new positions that are filled and trained.



Analysis of results and challenges: A fairly large increase in staff is necessary to implement the National Pollutant Discharge Elimination System wastewater permit and compliance program. Fourteen new positions were approved and are being hired. In order to be ready for program implementation, the new employees receive on the job and formal classroom training in areas such as permitting and compliance as well as gaining expertise in particular industry sectors.

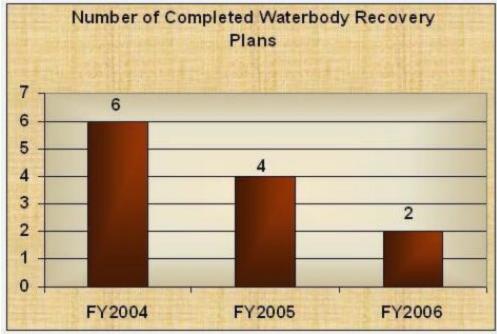
This is a new measure for FY2007 – Data should be available by the third quarter.

More information on the state effort to gain control over the National Pollutant Discharge Elimination System program can be found at: http://www.dec.state.ak.us/water/npdes/npdes.htm

## A3: Strategy - Restore polluted waterbodies to their designated uses.

**Target #1:**Two waterbody recovery plans per year.

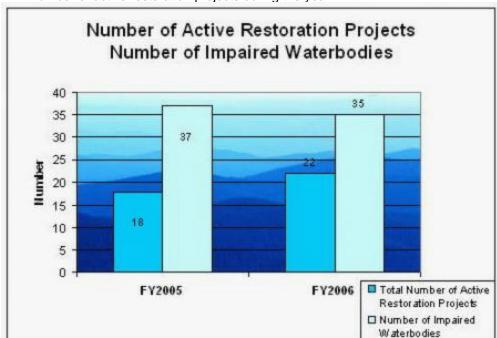
**Measure #1:** Number of polluted waterbody recovery plans completed during the year.



Analysis of results and challenges: When waterbodies are determined to be impaired (when they exceed Water Quality Standards for a particular pollutant), they are added to the Clean Water Act Section 303(d) list of impaired waterbodies submitted to the Environmental Protection Agency (EPA) every two years. It is incumbent upon the State and EPA to work to restore waterbodies. Restoration is accomplished through the development and implementation of either a Total Maximum Daily Load (TMDL) document, a Waterbody Recovery Plan, or through the implementation of permits or other controls. These plans or permits identify the source of the pollutant and the amount of pollutants that can be introduced to the waterbody while still allowing overall recovery to proceed. With this knowledge, parties who discharge pollutants are given an "allowance," or "total maximum daily load" for that pollutant, and/or prescriptive actions called Best Management Practices (BMPs) that they must follow, to stay within that allowance.

The first step toward the recovery of an impaired waterbody is the development of the TMDL or Waterbody Recovery Plan. The EPA is required, by court order, to complete at least two of these documents in Alaska, each year. TMDLs and Waterbody Recovery Plans developed by DEC, either directly through staff work or indirectly through contract or grant efforts, are approved by EPA and can be applied to this legal requirement. EPA may also initiate work on TMDLs or Waterbody Recovery Plans directly, with their staff or contracted efforts.

DEC strongly supports the development and implementation of these plans and has committed to completing a minimum of two per year. In FY2003, two were completed; in FY2004, six were completed; in FY2005 four were completed and in FY2006, two were completed. Implementation is proceeding on all.



Target #2:Ten active restoration projects per year.

**Measure #2:** Number of active restoration projects during the year.

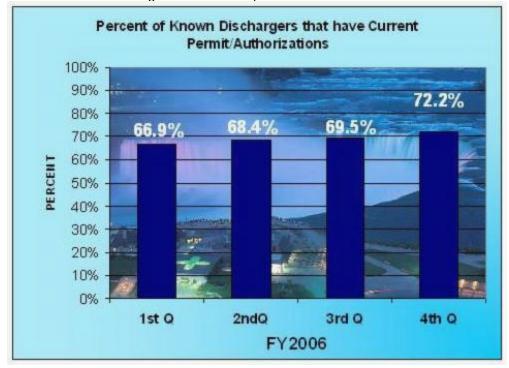
Analysis of results and challenges: Polluted or "impaired" waterbodies are identified in the biennial "Integrated Report" submitted by DEC to the Environmental Protection Agency. The target for restoration of these waterbodies is at least 10 active restoration projects per year.

Restoration projects may be conducted by grantees who have received funds through the Alaska's Clean Water Actions (ACWA) grant program, by contractors, by other State agencies, or by DEC personnel.

This is a new measure. Reporting began during the 3rd quarter of FY2004. Data will be reported annually at the end of each fiscal year. At the end of FY2005, 18 restoration projects and FY2006, 22 restoration projects were ongoing on impaired waters.

## A4: Strategy - Issue discharge permits/authorizations.

**Target #1:**100% of known dischargers have current permits/authorizations. **Measure #1:** % of known dischargers have current permits/authorizations.



**Analysis of results and challenges:** The Wastewater Discharge Permit program issues three kinds of wastewater discharge approvals:

- 1) State individual permits and authorizations under 18 AAC 72
- 2) State permits and plan approvals of on-site disposal (septic systems) under 18 AAC 72
- 3) Certification that EPA-issued NPDES permits, meet state water quality standards under 18 AAC 70.

State-issued permits and especially authorizations under state general permits, can meet the 100% measure more easily than certification of NPDES permits. This are quick turnaround, predictable discharges and do not require advanced analysis of the impacts. NPDES permits are for large volume, more complex discharges and state certification can be slowed during permit negotiations and responding to comments received by the public on draft permits.

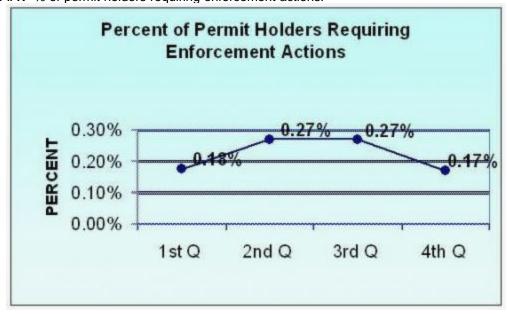
As part of NPDES primacy assumption, some state permits may need to be converted to NPDES permits. DEC and EPA plans to share permit duties as capacity building for primacy. With the transition, the program does not expect to meet its goal of 100% in this fiscal year.

A major tool for tracking and keeping permits current is the new permit database developed in anticipation of NPDES primacy. Achieving the 100% target will be improved with automatic notification of renewals built into the system.

For more information on the Wastewater Discharge Permits program, go to: http://www.dec.state.ak.us/water/wwdp/index.htm

## A5: Strategy - Enforce compliance with permit/authorization conditions.

**Target #1:**Permit holders are compliant with permit/authorization terms and conditions. **Measure #1:** % of permit holders requiring enforcement actions.



Analysis of results and challenges: Log Transfer Facilities: The owners/operators of Log Transfer Facilities may be covered under an EPA General Permit or a State Individual Permit. EPA is the enforcing authority of the conditions of a General Permit. DEC is the enforcing authority for State Individual Permits. For Individual Permits, strict parameters addressing the amount of bark that may be deposited into the waters and onto the bottom of waterbodies are identified as well as methodologies for determining those amounts. Periodic reports on the actions owners/operators take to implement requirements must be submitted. If the reports are found to be lacking, enforcement action is taken.

Waste Water Discharges: During FY2006, the program initiated administrative actions on several instances where regulated facilities (including domestic wastewater treatment plants and cruise ships) were known or suspected to not be in compliance with state requirements.

DEC can and does enforce wastewater and water quality regulations as follows:

- For failure to obtain a permit for a discharge to surface or groundwater for activities requiring a permit.
- For failure to meet end-of-pipe limits or for exceeding water quality standards in the receiving water.
- For failure to comply with other permit requirements such as reporting monitoring results.

Typically, staff seeks additional information regarding an alleged violation and/or issue notices of violation to obtain the owner's attention and corrective action. Of the approximately 1000 known wastewater facilities, staff performed 110 on-site inspections in FY2006. Minor compliance issues are identified for the owner/operator for resolution at the time of inspection without formal enforcement actions. In addition to actions reported on permitted facilities, in FY2006 staff issued 10 warning letters and notices of violation, leading to corrective action to dischargers based on inspections and complaints. Civil penalties are pending into FY2007 for some passenger vessel dischargers.

## **Component: Facility Construction**

## **Contribution to Department's Mission**

Assist communities in improving sanitation conditions.

### **Core Services**

- Provide grants, loans and engineering assistance for drinking water, sewerage, and solid waste facilities.
- Provide training programs for and certification of water and sewerage system operators.
- Provide over-the-shoulder and emergency assistance to system operators in remote communities.

| End Results   | Strategies to Achieve Results   |  |  |
|---|---|--|--|
| A: Citizens are protected from unsafe sanitation  | A1: Allocate funding based on health related needs.                               |  |  |
| facilities.   |   |  |  |
| T   | Target #1: 2.5% annual reduction in rural sanitation                              |  |  |
| Target #1: 100% serviceable rural Alaska homes are  | deficiencies that are health related.   |  |  |
| served by safe and sustainable sanitation facilities.  Measure #1: % of serviceable rural Alaska homes served | Measure #1: % reduction of rural sanitation deficiencies that are health related. |  |  |
| by safe and sustainable sanitation facilities.  | that are nealth related.  |  |  |
| by sale and sustamable samation facilities.   | A2: Increase operator certification compliance.                                   |  |  |
|   | Target #1: 2% annual increase in the number of rural                              |  |  |
|   | sanitation systems which comply with water treatment                              |  |  |
|   | operator certification requirements.  |  |  |
|   | Measure #1: % annual increase in the number of rural                              |  |  |
|   | sanitation systems which comply with water treatment                              |  |  |
|   | operator certification requirements.  |  |  |

# **Major Activities to Advance Strategies**

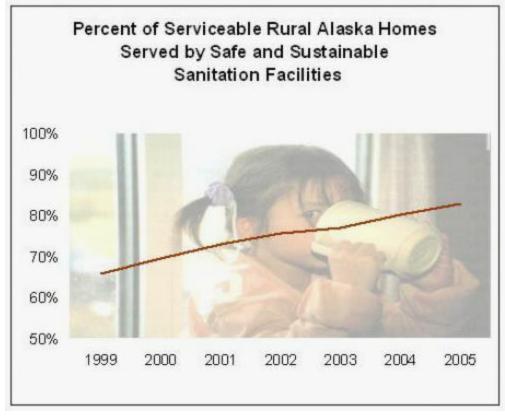
- Provide engineering and technical assistance to communities.
- Track grant payments.
- Execute loan agreements.
- Administer grants and loans.
- Track loan payments.
- Train water and wastewater facility operators and respond to emergencies.

| FY2008 Resources Allocated to Achieve Results |                      |    |  |  |
|---|----------------------|----|--|--|
| FY2008 Component Budget: \$6,728,300          | Personnel: Full time | 34 |  |  |
|   | Part time            | 0  |  |  |
|   | Total                | 34 |  |  |
|   |                      |    |  |  |

#### Performance Measure Detail

### A: Result - Citizens are protected from unsafe sanitation facilities.

**Target #1:**100% serviceable rural Alaska homes are served by safe and sustainable sanitation facilities. **Measure #1:** % of serviceable rural Alaska homes served by safe and sustainable sanitation facilities.



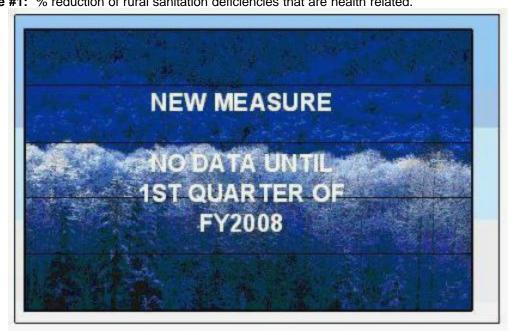
**Analysis of results and challenges:** Rural Alaska is characterized by over 280 isolated villages scattered across an area more than twice the size of Texas. The residents in many of these communities lack drinking water and wastewater infrastructure that is fundamental to protecting public health. The Village Safe Water program works to improve the health and safety of rural Alaskans by assisting communities to plan, design and construct safe and sustainable sanitation infrastructure.

Data to measure progress toward meeting the goal of all serviceable rural Alaska homes being served by safe and sustainable sanitation systems is collected on an annual basis following the prior year's construction season. A serviceable home is defined as an existing home that is occupied year round and located in an area where piped, closed haul or individual septic tanks/ wells are feasible. A sanitation system is defined as sustainable if the community managing it has the financial, technical and managerial capacity to properly operate and maintain it over a period which equals or exceeds the system's design life. For the last six years, the percentage of rural Alaska homes served by adequate sanitation systems has increased by an average of 3% per year. Contingent upon the availability of funding at FY2006 levels, the program's goal continues to be an average increase of 3% per year.

Data to measure progress toward meeting the goal of all serviceable rural Alaska homes being served by safe and sustainable sanitation systems is collected on an annual basis following the prior year's construction season. Data for FY2006 will be available after the second quarter of FY2007.

# A1: Strategy - Allocate funding based on health related needs.

**Target #1:**2.5% annual reduction in rural sanitation deficiencies that are health related. **Measure #1:** % reduction of rural sanitation deficiencies that are health related.

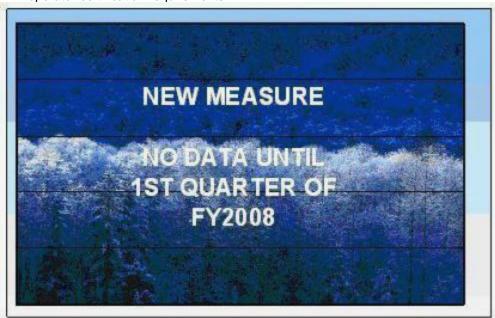


**Analysis of results and challenges:** This is a new measure for FY2007, data will be available during the first quarter of FY2008.

### A2: Strategy - Increase operator certification compliance.

**Target #1:2**% annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.

**Measure #1:** % annual increase in the number of rural sanitation systems which comply with water treatment operator certification requirements.



**Analysis of results and challenges:** This is a new measure for FY2007, data will be available during the first quarter of FY2008.